FOOD FOR THE HUNGRY INTERNATIONAL
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FISCAL YEAR 2000 RESULTS REPORT &
FISCAL YEAR 2002 RESOURCE REQUEST

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TABLE OF CONTENTS

FISCAL YEAR 2000 RESULTS REPORT

I. RESULTS REPORT

A. ANNUAL RESULTS

FHI's DAP program focuses on improving household food security and maternal and child health care for almost 47,000 families (272,600 people) in the Northern Sofala districts of Marromeu, Gorongosa and Nhamatanda, primarily through training. Both programs continued to demonstrate good results in FY00 and are well on track to exceed most LOA project impact indicators. The Health Program has already achieved 14 of 20 LOA targets for indicators measured for FY00, while the agriculture program has achieved 15 of 30 targets. All results which were equal to or below 95% of target or above 120% of target will be specifically discussed.

AGRICULTURE PROGRAM

Marketing And Farmer Group Development

The major thrust of the agriculture program is to increase the percentage of farmers selling their produce and increase their incomes from sales through the provision of marketing, production and farmer association training. FHI's approach has been to focus on a few key crops with high commercial potential and low production risk to the farmer, namely maize, rice, pigeon pea, birds eye chili peppers, sesame seed, vegetables and honey. FHI particularly seeks to foster the development of farmer groups and associations who are able to make the market linkages to sell their produce jointly for the best possible prices.

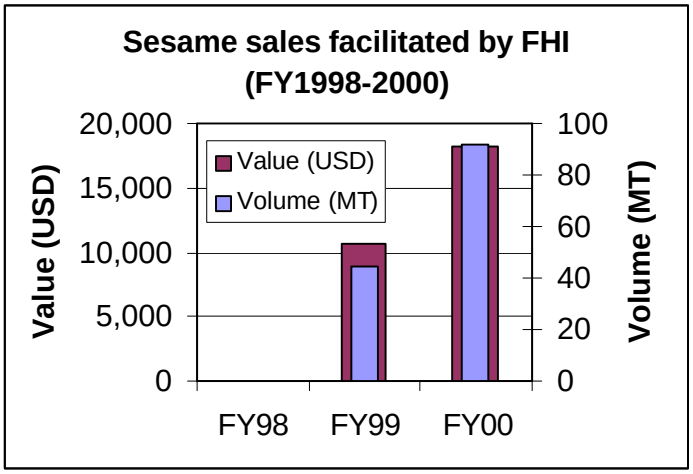
While FHI took a strongly interventionist role last year, in order to "kick-start" the marketing process for cash crops, this year many activities have been taken over by private companies and farmer associations themselves, while FHI played a facilitating role. Although FHI continues to negotiate with commodity buyers on farmers behalf, farmers are now transporting their produce to central district buying points. Now that sufficient quality and quantity of agricultural produce offered for sale has reached an acceptable levels, commodity buyers are investing in district level marketing. This includes warehousing, transport to collect the product from communities and bring it to their central warehouses; and seasonal purchasing staff who pay farmer marketing groups directly.

This year FHI facilitated sales grew 24% from 195 to 241 MT of produce, although the value of the produce was similar to the year before as shown in the table below. There was also a 71% increase in the number of families participating in FHI facilitated sales (3,710 families in all this year). FHI had forecast higher sales figures, principally of maize. However, a glut in the world market for maize in the early part of the season, resulted a lack of interest amongst buyers. A buyer was identified, but offered a price that was unattractive to many farmers who chose to hold on to their product or sell in smaller quantities to local traders. Nevertheless, 50 MT of maize was marketed though bulk sales facilitated by FHI (later in the season).

FHI continued to form and train marketing groups this year. Sixty-two percent of farmers participated in bulk sales through 129 of these groups this year. This compares with 25% of farmers in 40 groups in FY1999. Groups have also grown stronger, now marketing an average of almost 1 MT of produce each at a value of $226, compared to 273kg valued at $56 the year before. A number of groups are now obtaining bank accounts and receiving payment by check. This is welcomed by buyers who can reduce the need to transport large quantities of money to the district.

	Individual farmers		Informal groups		Associations		Total		% Change
	FY1999	FY2000	FY1999	FY2000	FY1999	FY2000	FY1999	FY2000	
Value of sale (USD)	41,130	13,748	568	26,960	1,678	2,177	43,376	42,885	-1%
Quantity sold (MT)	184	117	4	123	7	1	195	241	24%
Number of associations	N/A	N/A	33	126	7	3	40	129	223%
Number of families/ members	1,630	1,414	373	2,212	172	84	2,175	3,710	71%
Average value of sale per family (USD)	25	10	2	12	10	26	20	12	-42%
Average quantity of sale per family (kg)	113	83	10	55	42	13	90	65	-28%
Average value of sale per association/group (USD)	N/A	N/A	17	214	240	726	56	226	302%
Average quantity of sale per association/group (kg)	N/A	N/A	10	55	42	13	273	958	252%

FHI has continued to be successful with introduced cash crops, most notably with sesame. The main oilseed buyer, Mozambique Industrial had maintained there was no sesame seed grown in Sofala province until FHI facilitated their purchase of 44.6 MT from 746 farmers in FY99. This year the volume of sales rose to 91.7 MT from 1,302 farmers. As the volumes of produce have grown so have the number of buyers, and FHI were able to identify three buyers this year in place of a single buyer in FY99. The world market remains very strong for this crop and it is expected that sales in FY2001 will continue to strengthen.



Birds eye chili pepper sales were modest this year, primarily due to the poor price offered in FY99, many farmers decided not to begin or expand production. However, slow and low germination of available seed was also a factor in lower production. This year prices have risen from $0.77/kg to $1.71/kg and there is increased interest in the country for this high value crop. It is therefore highly likely that production will increase next year.

Pigeon pea had also been showing promise with FHI facilitated sales growing almost seven-fold from 6.7 MT to 47 MT from FY99 to FY2000. However sales of 49 MT in the first quarter of FY2001 were disappointing, due to a drop in the world market price for this commodity. Unusually favorable climatic conditions in Asia led to excellent harvests at a time that coincided with pigeon pea marketing in Mozambique. As with maize, many Sofala farmers preferred to sell the product to local traders, or use it as in kind payment, rather than participate in bulk sales. It is therefore likely that FHI facilitated sales will fall short of the forecast this year, however, long term market prospects remain favorable for this crop.

FHI has made dramatic progress in encouraging the development of honey production and marketing. This year, 1,037 liters of honey valued at $2,085 was sold by apiculture groups in Gorongosa. This compares to just 30 liters in FY99. The main buyers of the product were supermarkets in the provincial capital. During the year, the apiculture groups formed a forum, the Honey Commission of Gorongosa, which is charged with legalizing their documents, running the honey house and contacting buyers. The commission met with and signed contracts for the supply of honey to Shoprite, a large Beira based supermarket, as well as other supermarkets and buyers. It has also recently acquired via the government, a small shop in the Gorongosa market. It has also opened a bank account. Two of the supermarkets were so impressed by the quality of the honey that they are planning to market it in neighboring provinces and in South Africa. FHI is planning to expand this successful activity to Nhamatanda district in FY2001.

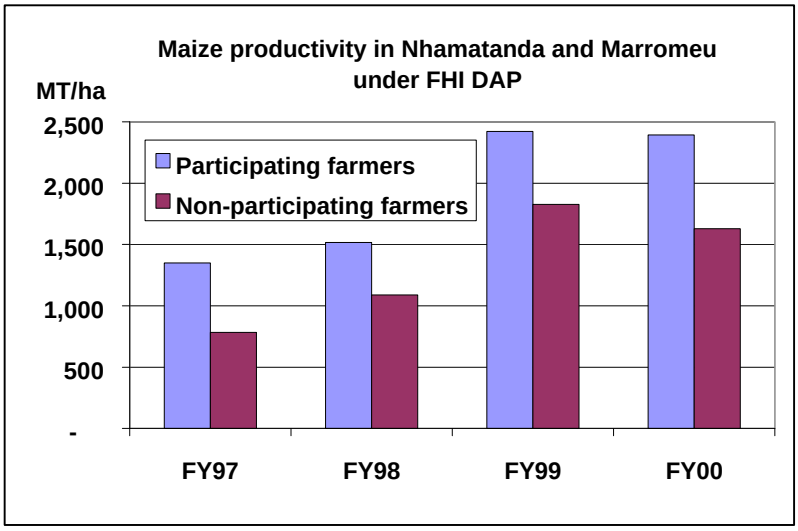
FHI has successfully demonstrated to farmers that there is a ready market for specific traditional and cash crops if provided in sufficient quantity and quality. Farmers are responding to these new lucrative marketing opportunities by expanding their production and forming marketing groups. Private sector commercial buyers now realize that the family sector can produce sufficient quantities of high value exportable cash crops and are responding by investing in district level buying posts and warehousing facilities.

Production Extension

The extension unit provided regular training to 4,826 farmers directly and 4,444 farmers through 96 leader farmers, reaching 40-50% of farmers in the project areas. Although this is only 73% of the FY2001 target (Indicator 19), the LOA target will still be achieved due to the large numbers of families assisted in FY99.

In addition to training farmers in association and group development and marketing, extensionists supported by research technicians, are successfully training farmers in improved farming practices as well. The goal of such training is to sustainably increase agricultural productivity and production. This effort focuses particularly on the principle staple (and cash crop) of maize, and adoption of recommended techniques are resulting in maize yield increases. This result has been achieved despite erratic rainfall this year, which came late to many parts of project areas, causing stunting of maize. Late and heavy rains then compounded this problem. The LOA target (Indicator 4) for maize productivity has now been exceeded by achieving 131%.

FHI client farmers produced 20% higher yields than non-project participants, (see graph opposite) mainly due to higher planting density. The maize yield gap is continuing to narrow suggesting improving production stability. However farmers plant an average of 23,000 plants/ha, far short of the 56,000 plants which would give optimum yield, and so considerable scope exists to raise productivity even further.



Rural Enterprise Development

Access of farmers to quality inputs has been a serious constraint to agricultural development. FHI is working to remedy this by encouraging the start up and development of input supply businesses through provision of inventory credit and business training. This year, FHI helped link local input dealers to private sector suppliers but did not provide them with seed. Some businesses have found this difficult and the number of businesses continuing to sell inputs has fallen from 24 to 15. This still meets the LOA target of 5 businesses, but explains the fall off in revenue which at $2,333, was 50% of that planned for FY00 (Indicator 10).

Adaptive Research

The Research Unit continued to conduct most activities in cooperation with national agricultural research institute (INIA) and various international research centers and non-government institutions such as SARRNET, Sasakawa Global 2000, AVRDC and TechnoServe. This past year marked the final year of on-station research, which has played a leading national role and an important regional role in agricultural research; of special note is the

identification of locally adapted, high yielding varieties of maize and high vitamin A content sweet potato. The majority of LOA targets were exceeded significantly, and on balance the research unit has more than met LOA expected results.

As the research station was in its last year, staff concentrated on the training of extensionists and leader farmers rather than directly on farmers themselves. Furthermore, adaptive research has put more emphasis onto on farm research and demonstration as a practical way to achieve high adoption rates in place of encouraging farmer visits to the research station. For these reasons the number of Sofala extensionists trained in field days at the station (indicator 21) was exceeded at 370%; while the number of farmers visiting the station (indicator 22) was below target at 55%. In terms of LOA targets, indicator 21 has been exceeded with 349 extensionists having visited the station, while indicator 22 of 1,900 farmers visiting the station will not be achieved.

The closing out of the research station also accounts for why indicators of on-station trials conducted and technologies developed/disseminated (Indicators 31 and 32, respectively) fall short of the FY targets. However, LOA targets for these indicators have been exceeded for trials conducted, and were close to being achieved (86%) for technologies developed/disseminated. The five on-farm trials fell slightly short of the target six trials conducted (indicator 30), however the LOA target for this indicator has been exceed (150%).

The research unit has been diligent about disseminating results to other interested organizations, through quarterly and annual newsletters, as well as hosting research station visits and participation in conferences. Indicator 25, provincial organizations receiving research results, was achieved this year, however the LOA achieved fell slightly short of the target (90%).

The station has continued to identify varieties which not only are high yielding, disease tolerant and acceptable to farmers; but are also qualitatively more nutritious than existing varieties used by farmers. The following trials were continued:

1. Evaluation of 20 varieties of orange fleshed sweet potato varieties high in beta carotene content
2. Evaluation of 20 lines of quality protein maize developed by CIMMYT
3. Evaluation of commercial hybrid and open-pollinated maize varieties available at SEMOC

High yielding sweet potato varieties[1] have been identified which produce over 15 MT/ha compared to 8 MT/ha for local varieties. This valuable resource was multiplied and distributed to 8,018 flood victims in the neighboring district of Buzi, (non-project area). Four promising varieties of cassava, Bedu, TMS 42025 (developed by IITA), Fernanado Po, and Manhocaola, were identified for their high yield and farmers' acceptance and multiplied for distribution to farmers.

FHI is addressing the shortage of appropriate seed varieties available to farmers in their local areas through participation, along with Nhamatanda government extensionists, in the SADC/GTZ Small Scale Seed Production Project. Farmers evaluate varieties (maize and cowpea) through on-farm demonstration plots and then multiply their preferred varieties. They then make this seed available to other farmers in their areas.

Adaptive research continues to support the health program promotion of improved nutrition, through the promotion of vitamin A rich crops. On-farm demonstration plots were established for vitamin A rich vegetables[2] that are easy to

[1] Resisto, Caromex, NC 317, Japonica Tressissino Selecta, Nemagold and Kandee

[2] Other indigenous vegetables promoted for home production and consumption are sweet potato (orange fleshed), cassava (leaves) and squash.

grow and are adapted under Sofala conditions or are indigenous in the area[3]. Seeds were produced on station as a start-up source of seeds for further seed multiplication by farmers.

The station has also carried out research into soil improving legumes over the DAP in support of the production extension unit. As their awareness of soil fertility problems and solutions has increased as a result of FHI's extension efforts, farmers have expressed interest in practicing crop rotation and green manuring. The research unit has been able to provide the extension team with tested recommendations to pass on to farmers, as well as multiplying and distributing seeds of mucuna (*Mucuna pruriens*) and jack beans (*Canavalia ensiformis*) to leader farmers. These leader farmers are multiplying the seeds for their use and are distributing it to other interested farmers.

Farmers in the target districts continue to experience significant production losses due to poor post-harvest handling practices. The problem seems to be even more significant now that the farmers have increased their production. A training manual for Sofala extensionists on recommended post-harvest management practices was compiled, including some of the research results obtained at FHI Lamego research station. A formal training was then given for FHI and government extensionists at government request.

MATERNAL/CHILD HEALTH AND NUTRITION PROGRAM

The maternal/child health and nutrition program assists approximately 47,000 families with almost 100% coverage in assisted areas. Excellent results continued to be shown this year and the program is on track to exceed expected LOA targets. Fourteen of 20 FY2000 targets were achieved and a significant number have already passed the LOA targets. Most results are very close to the target for FY00 or slightly exceed it. The indicator table may be found in appendix A. The marked improvement in the knowledge and practice towards the specified health and nutrition program packages covered has emanated from the simple and clear messages that the project has used with the active and full participation of the beneficiary communities and the collaboration from the District health services.

Due to the program's success, staffing was expanded in existing districts and the program has been extended to Gorongosa District. Training is currently done by approximately 4,485 volunteer mothers directly supervised by 48 staff. In FY2000 topics included control of diarrheal diseases (CDD), nutrition and immunizations, control and treatment of malaria and control of STDs including AIDS.

The multi-million dollar rehabilitation of the previously derelict sugar estate in Marromeu district by the recently privatized Senna Sugar Estates is likely to have a profound affect on the program in FY2001. It is possible that difficulties will be encountered in mobilizing volunteers to participate in the program, as many are keen to seek work as day laborers. The development of the sugar estate may also have a negative impact on nutrition if it supplants many food crops, particularly in communities on company land where farmers previously had their own fields.

Nutrition Indicators

As shown in the indicators table in Appendix A, there is a marked improvement in the nutritional status of children as a result of the interventions tackling the major contributing factors to malnutrition in addition to the nutrition education given to the mothers. Improved breast feeding practice, improvement in the control and prevention of diarrhea and improvement in immunization coverage will significantly contribute to the effort in improving the nutritional status of children. This will be further strengthened in the coming future using the "Hearth" method that includes growth monitoring and nutrition education.

[3] bitter gourd (cacana), moringa (sangoa), and amaranthus (boa).

Indicator number 1. Height for age
As agreed with USAID, this indicator is only measured at baseline and in FY2001 final evaluation.

Indicator number 6. Increased consumption of vitamin A rich food
The percentage of children 6-23 months consuming at least one vitamin A rich food during the previous day decreased from 94 to 84%. This may be due the seasonal variation of the data collection periods, as the FY99 measurement was undertaken in December, whereas FY2000 was measured in July, when there may be less vitamin A rich food available

Indicator number 20. Distribution of ORS packets
Not as many ORS packets have been needed as was anticipated due to the success the program has had in promoting earlier treatment of diarrhea with home liquids. FHI however continues to encourage use of ORS packets for all cases of diarrhea.

Malaria Indicators
Malaria is the principal cause of mortality w ithin FHI operation areas affecting all age groups of the population. Efforts made to raise awareness on the prevention of mosquito bites using various methods such as the use of Insecticide Treated Bed Nets (ITBN) has shown little effect as the availability and accessibility to ITBN is limited to the vast majority of the target population in the rural areas.

This subject matter began to be taught to mothers in October of FY2000, with the first measurement of this indicator undertaken in November, as it was not foreseen as an intervention at project inception. Therefore there is no real baseline statistic for these indicators and consequently no target for FY2000. Given these facts it is difficult to foresee whether this indicator will be met or not, however there has been a notable improvement from FY99. Positive results are being shown in increased health seeking behavior as significant number of mothers are taking their children to health posts for treatment as soon as they get malaria. In addition, a number of health post center nurses have noted a reduction in the number of cases, which they attribute to the program.

Process and Outcome Indicators
Indicator numbers 24, and 26 – 28. Number of health promoters (paid FHI staff), meetings, leaders and house visits
These indicators were exceeded as a whole but lower than originally planned for Nhamatanda and Marromeu as FHI decided to use the budget to expand into Gorongosa district rather than to add more staff in existing districts.

As time goes, the community has started to appreciate the advantages of having resource people within its vicinity as volunteer mother leaders and health promoters in counseling their day to day health and nutrition related problems. Especially in the absence of basic health services, the contribution of mother leaders and promoters with a simple and clear health messages has enabled to save the lives of many children which the community has witnessed during the project life period. Currently mothers are much more interested than ever to work hand in hand with the mother leader and promoters. They participate actively in meetings that the mother leaders call to share health information and have developed a positive attitude to spend their time for one counseling during home visits carried out by mother leaders and promoters. As a result there is a marked increase in these indicators.

Participant Feedback
The program has been very successful in improving diarrhea management and breastfeeding, which resulted in dramatic and visible improvements in child health, as described in this section in FY99 R2. This has helped the motivation of the volunteer mothers, and also been appreciated by health post workers who report that the program has been effective in reducing diarrhea cases reporting to health posts and health centers.

A focus group discussion carried out with beneficiary communities in May revealed that malaria, diarrhea and parasitosis are the most serious diseases in the community affecting children while malaria and respiratory diseases such as TB were the most common health problems among adults. Although FHI has been involved in addressing these health problems via the community based health/nutrition interventions there still exist a problem of accessibility and availability of medical services.

The health education sessions on HIV/ AIDS prevention and control has enabled mothers to discuss freely among themselves increasing incidence of AIDS, the high risk sexual behavior prevailing in their community and the consequences of AIDS at an individual, family and community level. The health education is extended further to schools and churches with the active participation of teachers and religious leaders. Participants have shown great interest in the HIV/ AIDS prevention and control lesson plans.

Intersectoral partnering

The program field staff has participated with community leader committees formed by the MOH and Health Alliance International. These committees are designed to help community members be involved in decision-making regarding their own community's health needs. These committees are still in their infancy and have not yet had an impact on program management. Efforts to improve and expand these committees in the rest of the districts will occur in the coming year.

Joint ventures with the district MOH team on Vitamin A capsule distribution, immunization and health education programs continue. The program has provided assistance to the MOH in terms of transport for vaccination and vitamin A distribution, as well as helping to mobilize communities to attend MOH vaccination days.

The district MOH counterparts were invited to participate in a three-day workshop on reaching communities with health information on the prevention and control of HIV/ AIDS. Similarly, district health managers have participated in three days nutrition intervention training using "Hearth" methodology.

Significance of Accomplishments

Improved health of the most vulnerable children (those under five), and increased understanding of the role of variety in the diet will increase the health and stamina of both children and adults. Mothers report spending less time taking children to health posts resulting in more time for work in the fields. This also reduces the burden on health post staff and allows them to focus on illnesses that truly need expert health care (unlike most diarrheal diseases that do not). Even food secure children lose significant amounts of body weight through illness, resulting in increased susceptibility to diseases. According to UNICEF figures, on average, 8% of body weight is lost during measles and 2% of body weight is lost during *each* normal bout of diarrhea. With an average (also calculated by UNICEF) of eight bouts of diarrhea per year, this quickly adds up to dangerous levels and significantly impair both physical and mental development. The dangers are magnified in a food insecure area, but can be mitigated even in the absence of increased availability of food. Therefore, raising mothers awareness on child feeding practices, child care and health seeking behavior, not only minimizes malnutrition but also the burden of disease that a child suffers from as a result of impaired immunity.

The fact that so many program participants are taking an active role by training others significantly enhances their ability to solve future health problems on their own. Local participation/management of community health committees further strengthens this ability. Men and women are also being empowered to discuss their concerns regarding AIDS and to take measures to reduce the rate of infection.

Approximately 50% of the target population in each district, mostly those nearby government health facilities have been beneficiaries of the program. Initially these areas did not have accessibility to basic health/nutrition services, however, access to these services for some project area communities has improved during LOA due to efforts by the GOM and various NGOs. In view of this, FHI/M will be extending its intervention to the nearby villages that are still lacking basic services within the districts. Furthermore the project gives emphasis on major public health concerns such as the prevention and control of HIV/ AIDS.

PROGRAM CONSTRAINTS

The cyclone and flooding of late February and March, 2000 interrupted the development program to some extent and impacted results to a limited extent. Although it affected non-project areas, FHI temporarily re-deployed many of its health education staff, supervisors and managers to meet the life-threatening situation. In fact, FHI was the first agency to respond in several Sofala areas during the first week of the disaster response. Development program managers and health staff were back in place in early April, although FHI continued to run an emergency relief/rehabilitation program throughout the year until December, 2000.

B. MONITORING AND EVALUATION, AUDITS AND STUDIES

UPDATE OF MONITORING AND EVALUATION SYSTEM

The monitoring and evaluation system set up at the start of the program has remained virtually unchanged. Indicators are measured by relevant project staff on a weekly, monthly or annual census basis. These include data collection on association and micro-enterprise earnings, and annual crop cuts (maize), for agriculture and output data for health. Collection of this data is supervised by the monitoring and evaluation manager, program managers, and field supervisors. Data collection protocols are in place to ensure uniformity of measurement and periodic training of staff in data collection is undertaken as required.

Monitoring of daily educational group lessons is accomplished with the help of quality control checklists designed to help the health promoters and agricultural extensionists monitor their presentations and provide a quantitative performance score to assist and facilitate supervisory feedback.

Statistical surveys are undertaken for Marromeu and Nhamatanda districts every two years, with the analysis and report writing undertaken by an external consultant. This incorporates the MSU INCPROX methodology for measuring household income. The district of Gorongosa as it has a shorter project timeframe has statistical surveys planned/executed at baseline and final year only. The health component in addition carries out a semi-annual monitoring of the majority of it's indicators. Collection has not changed from that described in section 3.2 of the revised health DAP, 'Program Monitoring.'

FHI does use a number of common indicators to other USAID implementing partners and also uses the same income measurement formula. Annual results are presented and shared with other agencies at an annual meeting organized by the mission, at which the definition of these indicators is discussed and agreed. Further collaboration is limited to sending other cooperating sponsors copies of relevant reports. Information is shared with the relevant government agencies at all levels and also with all other NGOs undertaking related projects in the province.

KEY FINDINGS OF EVALUATIONS, AUDITS OR STUDIES CONDUCTED IN FY2000 AND HOW THEY ARE BEING ADDRESSED.

Midterm Survey Recommendations

FHI's midterm surveys for health and agriculture were carried out in August/September 1999 and were presented to USAID Mission and FFP Washington Mission in March, 2000. See relevant report and also Monitoring and Evaluation section of FHI R2 FY99 for details.

With regard to the agriculture component, a number of recommendations arising from the midterm survey have been addressed. FHI contracted a consultant to more clearly define fewer messages for transmission to farmers. The new messages will be transmitted to farmers in FY2001. The extension team is also concentrating on messages identified by the consultant which have been widely adopted and have resulted in yield increases.

FHI previously sold seed directly to farmers only to facilitate the introduction of new cash crops such as pigeon pea and chili peppers. Now that these crops are well established in project areas, FHI no longer sells seed to farmers on credit.

FHI has decided not to include rice cultivation messages for Marromeu, since the project areas where the project now works are all dominated by maize and rice growing is secondary. Moreover only 15% of extension staff are based in this district.

FHI has re-emphasized improved maize storage methods for both Nhamatanda and Marromeu as a result of the midterm survey findings and recommendations.

Agriculture Behavior Change Communication Consultancy

This study was carried out in November-December, 1999 and is included in Appendix B1. The recommendations included the following:

1. Review key problems and causes, including social / spiritual
2. Develop a set of cultural notes
3. Develop curriculum for training staff and participants. State key behavior changes.
4. Develop new lesson plans to change attitudes rather than simply communicate knowledge
5. Provide a refresher training program on non-formal education techniques for extension staff.
6. Provide appropriate training materials
7. Improve use of quality control checklists
8. Investigate the possibility of using radio
9. Improve functioning of market info boards.

FHI has addressed, or is in the process of addressing the majority of issues raised by this consultancy. A consultant was hired to develop and evaluate extension messages currently being given, and staff have been given the new lesson outlines and trained in their use. FHI also conducted a weeklong workshop in July, 2000, focussing on participatory methods for adult learning, attended by all management staff of both agriculture and health programs. This included how to write lesson plans. FHI has also given a number of follow up trainings in the proper use of quality control checklists. As a result there has been a marked improvement in the quality of extensionist training sessions with farmers, and junior management training of extension workers.

The elaboration of lesson plans is decentralized, however, senior management staff are monitoring staff training sessions to ensure that participatory training techniques are being used and that extensionists are taking the time to develop simple didactic materials. In the medium term, FHI Mozambique will develop additional didactic materials to complement these.

Final Report Apiculture 2000 Gorongosa Mountain Project (ACDI/VOCA)

FHI has addressed all the recommendations presented in a study into the options for the development of bee-keeping by ACDI/VOCA consultant report of September 1999. A copy of the final report appears as Annex 6 of FY99 R2. A second consultancy was carried out in September 2000. This report is presented in Appendix B3, and FHI plans to adopt most of the recommendations made in FY2001.

Health Behavior Change Communication Consultancy

As with the agriculture consultancy above this evaluation was carried out in November-December, 1999 and is included in Appendix B3. The main recommendations were:

1. Undertake a small anthroprometric study to demonstrate the impact of the dramatic behavior and practice change
2. Include men and other community members more systematically in educational sessions to build support for project objectives
3. Develop another cadre of promoters to work more intensively with TBA's using current and new flipcharts.

4. Improve lesson plans by:
   - involving Mozambican staff in the production of lesson plans and flipcharts so they reflect better local culture.
   - adding learning objectives to lesson plans
5. Promoters should do more spot checks of *Volunteer mothers'* work, and should have a form to report the results of this
6. Mothers should all know where *Volunteer mothers* live, and their homes should probably be marked
7. Promoters should improve training sessions by:
   - modeling the dialogue between *Volunteer mothers* and mothers in each training session
   - using verification questions after teaching the mothers a lesson, summarize the key messages at the end of the session, use questions to discover what blocks the mother might have to doing the behavior etc.
   - Promoters should begin to make sessions less "generic" and more geared to the particular needs of each group
8. Improved and wider use of quality control checklists of training:
   - Update the QI checklist for education with the Promoters
   - Use a QI checklist on individual counseling with the *Volunteer mothers*
9. FHI should develop a protocol for dealing with low post test scores
10. Consider giving special incentives to *Volunteer mothers* for seniority, in addition to giving them every 9-12m as is being done presently
11. FH should work to find other opportunities for the mothers in this highly developed network
12. Improve mechanism for finding newly arrived mothers

FHI has addressed or is in the process of implementing most of the relevant recommendations made.

FHI has not conducted an anthropometric study to measure the impact of due to lack of staff time. An anthropometric study will be undertaken as part of final project evaluation, including children aged 6-12 months from the same groups as the 6 monthly monitoring.

FHI is planning to have promoters work more intensively with TBA's using current and new flip charts this year.

FHI always involves Mozambican staff in the production of lesson plans and flip charts and their pre-testing. FHI will add learning objectives to lesson plans.

FHI has increased the number of spot checks of promoters of volunteer mothers this year. A supervision form will be shortly introduced.

The training performance of promoters has dramatically increased following the training skills development workshop held in July, 2000. Training sessions now include the opportunity for promoters to problem solve with volunteer mothers. An updated quality improvement checklist is currently in use, which staff are using with promoters to help them improve their performance.

Promoters have been encouraging mothers to show their appreciation to volunteer mothers. This year mothers in appreciation of the impact the program is having in improving the health of their children organized end of year parties for their volunteer mothers and promoters in approximately 30% of promoters' areas.

C. EXPENDITURE REPORT

Please refer to Appendices C1 and C2, for a comprehensive financial report for FY00 and LOA actual expenditures. Total funds available for FY00 decreased by $783,966 due less funding obligated for PVOII and s202(e) grants and a reduction in the amount of Title II funds received during FY2000. FHI/M total expenses for FY2000 were reduced by more than 14% ($294,718) compared to the previous period. A reduction occurred in all grants with PVOII expenditure reduced the most at 34%.

Total FY2000 expenditure remains about 29% under budget. All expense line items are under-budget, except for Other Direct Costs line item, which is 7% above the budget. The main reasons for cost reduction has been due to decline in international travel, reduction in salaried expatriate staff, and the reduction in vehicle running costs during the fiscal year. FHI/M also initiated a program to decentralize operations, which has begun to show some efficiency savings. Capital equipment purchases using USAID funding were not remarkable during this period.

MONETIZATION (TITLE II) FUNDS

During the FY a total of $1,047,357 was received from the proceeds of Title II commodities. This amount was adjusted for exchange translation loss on the fund balance at the end of the FY2000 (Appendix C5). The fund balance as at September 30, 2000 was $821,875 .

202(E) FUNDS

The 202(e) funds are only budgeted for the health program. The budget is typically within targeted levels.

PVO II (MISSION) FUNDS

PVO II funds were only used for the agricultural program. PVOII expenses declined by $206,784 due to continued and planned reduction in expatriate staff and the availability of program supplies in the local market. PVO II expenses for agriculture were less than planned in all areas of expense line items.

FHI/M MATCHING FUNDS

The total of FHI/M matched expenses was 69% under-budget. A total of $41,863 was charged to the match. FHI/M has decided to cover part of FY01 PVOII budgeted expenses from non USAID source until it fulfills its match obligation before the end of the current DAP.

FY 2000 MONETIZATION PIPELINE ANALYSIS

A pipeline analysis of foreign currency funds is included as Appendix D.1 The total income received, including interest, was $1,047,357. FHI/M had planned to spend $1,880,464 but spent only $1,255,266 (Appendix C6). There was a $1,029,784 balance carried forward from FY 99.

FY 2000 COMMODITY PIPELINE ANALYSIS

Appendix C4 provides pipeline analyses for all three-program activities.

FY 2001 BUDGET REVISIONS AND RESOURCE REQUIREMENTS

Revised budgets are presented by funding source and Title II activity in Appendix F. These budgets were previously submitted with the FY01 PAA. Despite the additional health & nutrition program started in Gorongosa district, there are no additional funding requirements beyond those committed in the original DAP.

D. MONETIZATION SALES

ANALYSIS OF MONETIZATION TRANSACTIONS

The repercussions of the “Latini” third country monetization problem were still carried into FY1999 and FY2000, and negotiations with “parties of interest “ continued. Problems developed in the vegetable oil market with prices falling, and one buyers ability to complete purchase became doubtful. Details of monetization activities and projects may be obtained from WVI, the lead agency of the Mozambican joint monetization umbrella group. A final version of the Bellmon Analysis is expected soon and will be forwarded when received. No significant changes are expected for FY2001 monetization plans. Benchmark recovery was 108.6%.

MONETIZATION RESULTS

World Vision will send these to USAID

FISCAL YEAR 2002 RESOURCE REQUEST

This section is not applicable as this DAP ends in September, 2001. The contents of this section therefore falls under a new DPP proposal, which FHI submitted to USAID in December, 2000.

APPENDICES

APPENDIX A: INDICATOR PERFORMANCE TRACKING TABLES

note- * indicates that the target for the given indicator has been changed from the original DAP

APPENDIX A1: INDICATOR PERFORMANCE TRACKING TABLE FOR AGRICULTURE PROGRAM

Indicator	District	Baseline	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY 2000 Achieved	FY 2000 Achieved vs. Target	FY 2001 Target	LOA Target	LOA Achieved
Rural household income increased in targeted areas	Nhamatanda	$253		$253				$266	$398	150%				$278	$278	$398
1. Total household income increased by 10%[4]	Marromeu	$239		$239				$251	$314	125%				$263	$263	$314
	Gorongosa[5]															
Increased sustainable agricultural output of target area households	Nhamatanda& Marromeu	373		373				448	360	80%				522	610	
2. The total production of maize per household increased by 40%[6] Measure:kg																
Target area households increased their potential for grain self-provisioning	Nhamatanda& Marromeu	*8.1*		8.1				10.1	13.1	130%				12.1	12.1	13.1
3. A four month increase in the number of months a household is able to subsist from the last harvest[7]																
Increased productivity of staple food crops by target area households	All	1,300	1,300	1,295	1,398	1,227	88%	1,495	2,001	134%	1,528	2,050	134%	1,560	1,560	2,050
4. Maize yield (kg/ha) increased by 20%*[8]																
Target areas households decreased proportion of harvested crop lost to pest damage or environment	Marromeu	6.8%		6.8%				5.78%	8.23%	70%				4.42%	4.42%	8.23%
5. Percentage of harvested maize lost in																

[4] Measured at Baseline, Midterm (except Gorongosa) and Final with the assistance of MSU.
[5] Gorongosa is awaiting a figure from MSU.
[6] Measured at Baseline, Midterm, and Final only. Based on farmer recall
[7] Measured at Baseline, Midterm, and Final only. Based on farmer recall for production.
[8] Measured annually with crop cuts using FAO methodology.

storage decreased by 35%[9]																	

[9] The weighted average of the loss associated with each of two technologies promoted is multiplied by the respondents claiming to practice the technology. This indicator was originally reported for both Nhamatanda and Marromeu. Since there is no signifigent storage problem in Nhamatanda this indicator and has been recalculated to measure progress in Marromeu.

Indicator	District	BaseLine	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY 2000 Achieved	FY 2000 Achieved vs. Target	FY 2001 Target	LOA Target	LOA Achieved
Target area households increased income from the sale of agricultural produce 6. Percentage of households selling agricultural produce from their farms increased to 55% in Marromeu and 50% in Nhamatanda[10]	Nhamatanda Marromeu	34% 30%		34% 30%				45%* 40%*	46% 26%	102% 65%				55%* 50%*	55%* 50%*	
7. Household income from maize sales increased by 40%*[11]	Nhamatanda & Marromeu	$10.23		$10.23				$11.76	$15.83	135%				$14.32	$14.32	$15.83
8. 35% increase in the percentage of households who sold more than three crops / vegetables/ fruits / forest products	Gorongosa	27%				27%								36.5%	36.5%	
Increased availability of agricultural inputs in target area 9. Number of agents and stores selling agricultural inputs increased from 3 to 15*	Nhamatanda & Marromeu	3		3	5*	16	320%	9*	24	267%	12*	12	100%	15*	15*	24
Increased total income of owners of small or micro enterprises 10. Total income of owners and employees of agricultural input suppliers increased by 40%[12]	Nhamatanda & Marromeu	$2,808				$2,808		$3,299	$7,070	214%	$3,791	$1,891	50%	$3,931	$3,931	$1,891
Increased number of target area households who have improved their agricultural knowledge, attitudes and practices 11. Increase in percentage of farmers that have adopted at least 8 project recommended practices*[13]	Nhamatanda & Marromeu	17.5%		27%				30%	27.5%	92%				41%*	41%*	27.5%
Indicator	**District**	**Baseline**	**FY 1997 Target**	**FY 1997 Achieved**	**FY 1998 Target**	**FY 1998 Achieved**	**FY 1998 Achieved vs. Target**	**FY 1999 Target**	**FY 1999 Achieved**	**FY 1999 Achieved vs. Target**	**FY 2000 Target**	**FY 2000 Achieved**	**FY 2000 Achieved vs. Target**	**FY 2001 Target**	**LOA Target**	**LOA Achieved**
12. 75% increase in the percentage of project area individuals who can identify three unsustainable farming practices*[14]	Gorongosa	8.0%				8.0%								14.0%	14.0%	8.0%

[10] Measured at Baseline, Midterm, and Final only. Based on farmer recall. Baseline figures and targets adjusted in Midterm survey.
[11] Measured at Baseline, Midterm, and Final only. Based on farmer recall.
[12] This indicator was modified as the FY97 baseline survey found that no one had sold any inputs.
[13] Average between FHI assisted and non-assisted farmers.
[14] Baseline and Final surveys.

13. 50% increase in the percentage of project area individuals who can identify three possible sustainable land management techniques*[15]	Gorongosa	14.0%				14.0%								21.0%	21.0%	14.0%
14. 75% increase in percentage of traditional leaders that understand the threat imposed by unsustainable farming practices*[16]	Gorongosa	X%				X%								X + 75%	X + 75%	X%
15. 35% increase in the implementation / adoption of *more than* three of the learned sustainable land management techniques in the project area*[17]	Gorongosa	32.0%				32.0%								43.2%	43.2%	32.0%
16. 50% decrease in the percentage of farmers burning their fields in the project area.[18]	Gorongosa	81.0%				81%								40.5%	40.5%	81.0%
17. Percentage of households that have implemented improved crop storage technology increased by 50%[19]	Marromeu	Husks 38% Smoke 26%		Husks 38% Smoke 26%				Husks 45.6% Smoke 31%	Husks 65% Smoke 30%	Husks 143% Smoke 96%				Husks 57% Smoke 39%	Husks 57% Smoke 39%	Husks 65% Smoke 30%
Increased number of target area households who have improved their agricultural knowledge, attitudes and practices 18. Percentage of farmers that receive systematically collected price information increased to 50%.[20]	Nhamatanda & Marromeu	0%	0%	0%				25%	10%	40%				50%	50%	10%

Indicator	District	Baseline	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY 2000 Achieved	FY 2000 Achieved vs. Target	FY 2001 Target	LOA Target	LOA Achieved
19. 25,210 farmers regularly assisted for one year by FHI/M agricultural extensionists*[21]	Nhamatanda & Marromeu	0	3,360	9,216	3,360	2,854	85%	3,360	2,629	78%						
	Gorongosa	0	N/a	N/a	1,440*	1,424	99%	1,440*	1,382	96%						
	All	0	3,360	9,216	4,800*	4,278	89%	4,800*	4,011	84%	6,640*	4,826	73%	6,640*	25,210*	16,475

[15] Baseline and Final surveys.
[16] Data being collected
[17] Baseline and Final surveys; On-going project monitoring and Quarterly Reports.
[18] Baseline and Final surveys.
[19] *This statistic applies to bulk maize storage only. Note that no distinction was made at baseline, though it can be assumed that responses would also have been related to bulk maize storage rather than seed.
[20] Measured at Baseline, Midterm, and Final only. Based on farmer recall.
[21] FY97 number assisted includes 5 districts under the SPEAR program, which overlapped with the beginning of the DAP. This indicator has been revised upwards to reflect the inclusion of Gorongosa and an increase in extensionists from 24 to 31

Indicator	District	Baseline	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY 2000 Achieved	FY 2000 Achieved vs. Target	FY 2001 Target	LOA Target	LOA Achieved
20. 10,230 farmers regularly assisted for one year by FHI/M- trained leader farmers*[22]	All	0	2,400	240	2,400*	1,274	53%	2,400*	2,226	93%	4,185*	4,444	106%	4,185*	10,230*	8,184
21. 210 Sofala Province extensionists have participated in field days at Lamego Research Station*	All	0	60	41	60	77	128%	60	76	127%	30*	155	370%	0*	210*	349
22. 1,900 farmers have visited the Lamego Research Station*	All	0	400	535	600	347	58%	600	208	35%	300*	166	55%	0*	1,900	1,256
23. 25 Sofala organizations received FHI/M research results each year	All	0	25	16	25	25	100%	25	20	80%	20	25	125%	0*	95	86
Increased knowledge of business practices																
24. 250 individuals have participated in a business training program[23]	Nhamatanda & Marromeu	0	50	54	50	601	1,202%	50	508	1,016%	50	0	0%	50	250	1,163
Increased agricultural infrastructure functioning in target area																
25. 350 improved storage facilities constructed*[24]	Marromeu	0	50	0	100*	66	66%	100*	73	73%	100	310	310%	100	350	449
26. 22 community price information boards showing the current prices of cereal crops	Nhamatanda & Marromeu	0	0	0	12	11	92%	22	24	109%	22	24	109%	22	22	24
27. 600 ag commodity price bulletins distributed per year (50 issues/mo.)[25]	All	0	0	0	250	230	92%	600	225	38%	600	0	0%	600	2,050	455
28. 582 on-farm demonstration plots established*[26]	Nhamatanda & Marromeu	0	64	144	64	96	150%	64	107	167%						
	Gorongosa	0			24*	21	88%	32*	31	97%						
	All	0	64	144	88*	117	75%	96*	138	144%	141*	137	97%	162*	582*	398
29. 406 community vegetable gardens established*	Nhamatanda & Marromeu	0	64	0	64	124	194%	64	95	148%	100*	159	159%	114*	406*	378
30. 22 on-farm research trials conducted*		0	4	11	6	11	183%	6	6	100%	6	5	83%	0*	22*	33
31. 40 trials conducted at Lamego research station*		0	10	21	10	27	270%	10	18	180%	10	5	50%	0*	40	71
32. 25 technologies developed and disseminated*		0	5	6	7	10	143%	7	5	71%	4*	2	50%	2*	25*	23

[22] This indicator has been revised upwards to reflect the impact of an increase from 48 to 93 leader farmers.
[23] Considers all those beneficiaries that have business and marketing trainings whether they be individuals, associations or input dealers. Only considers the formal trainings, not regular visits.
[24] In FY97 67% of farmers surveyed claimed crop failure due to the floods.
[25] FHI has distributed these to various organizations within Sofala. Work is underway to incorporate this bulletin into the Sofala SIMAP.
[26] FY 97 include results from 6 districts under SPEAR program. FY98 onwards include FHI extensionists and leader farmers.

Increased number of associations and members in target area	Marromeu	1	4	6	4	13	325%	7	13	186%	11*	13	118%	15*	15*	13
33. Number of associations increased from 23 to 55[27]	Nhamatanda	21	16	21	19	25	132%	25	24	96%	25*	24	96%	30*	30*	24
	Gorongosa	1						1*	1		4*	2	100%	7*	7*	4
34. Number of association members increased in each district*	Marromeu	200		370	250	392	157%	300	274	91%	350	274	78%	400	400	274
	Nhamatanda	525		525	578	502	87%	630	502	80%	709	502	71%	787	787	630
	Gorongosa							35			40	35	88%	44	44	35
ncreased employment opportunities in the target area	Nhamatanda & Marromeu	0	0	6	20	22	110%	50	60							
35. 200 small or micro-enterprises established[28]	Gorongosa	0				5			5							
	All	0	0	6	20	27	135%	50	65	130%	120	139	116%	200	200	139
Improve land tenure security																
36. 75% increase in the percentage of individuals aware of their legal title/rights to land.[29]	Gorongosa	11.0%				11.0%								19.3%	19.3%	11.0%

APPENDIX A2: INDICATOR PERFORMANCE TRACKING TABLE: HEALTH

'Children' refers to children between 0 and 23 months of age unless otherwise specified

Indicator	District	Baseline	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY2000 Achieved	FY2000 Achieved Vs Target	FY 2001 Target	LOA Target	LOA Achieved

[27] Association is defined as an organization registered with the local district Union of Associations.

[28] These micro and small enterprises are defined primarily as farmers' collectives selling agriculture produce jointly. This indicator originally measured the number of micro-enterprises established per year. As this could lead to double-counting the indicator has been changed to a cumulative measure.

[29] Baseline and final surveys.

Adequate nutritional status 1. Percentage of children 6-59 months in target area above –2 SD median height for age.		49%		49%										58%	58%	
Improve breast feeding practices 2. Percentage of participating children < 4 months being exclusively breast fed. ***(SO3)***	Nhamatanda Marromeu Nhamatanda & Marromeu Gorongosa	---[30] 54% --- 39% --- 46%		---[31] 54% --- 39% --- 46%	51%	68% --- 82% --- 75% ---	147%	85%*	91% 90% 77% 64% 85% 79%	81%	87%*	78% 89% 83% 34%	95%	90%*	90%* 53%	81% 79% 34%
. Percentage of participating children 20-23 months with continued breast feeding[33].	Nhamatanda Marromeu Nhamatanda & Marromeu Gorongosa	62% 52% 58% 96%		62% 52% 58% 96%	60%	58% 34% 45%	75%	62%	63% 48% 57%	94%	64%	74% 53% 65% 96%	102%	65%	65%	65% 96%
Improve complementary feeding practices . Percentage of participating children 6-10 months receiving at least three meals a day.	Nhamatanda Marromeu Nhamatanda & Marromeu Gorongosa	 24% 14%		 24% 14%	37%	58% 78% 68%	184%	70%*	80% 68% 74%	106%	75%*	93% 90% 92% 14%	122%	80%*	80%*	92% 14%
. Percentage of participating children 6-10 months with oil added to their weaning food.	Nhamatanda Marromeu Nhamatanda & Marromeu Gorongosa	 29% 6%		 29% 6%	40%	45% 23% 34%	85%	80%*	92% 87% 90%	112%	85%*	86% 90% 88% 6%	103%	90%*	90%*	88% 6%
Increase consumption of vitamin A . Percentage of participating children 6-23 months who consumed at least one vitamin A rich food the previous day.	Nhamatanda Marromeu Nhamatanda & Marromeu Gorongosa	 59% 12%		 59% 12%	65%	66% 56% 61%	94%	90%*	95% 92% 94%	103%	90%*	84% 83% 84% 12%	93%	90%*	90%*	84% 12%

[30] Answers differ depending on how the question is asked. Please see narrative of FHI R2 of FY99 for details.
[31] Answers differ depending on how the question is asked. Please see narrative of FHI R2 of FY99 for details.
[32] If mothers of children 20-23 months who are pregnant are excluded, continued breast feeding rates are approximately 6% higher.

Indicator	District	Baseline	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY2000 Achieved	FY2000 Achieved Vs Target	FY 2001 Target	LOA Target	LOA Achieved
'. Percentage of mothers in target area who know at least one category of vitamin A rich foods.	Nhamatanda Marromeu Nhamatanda & Marromeu	4%		4%				60%*	98% 88% 93%	155%				90%*	90%*	93%
8. Percentage of children 12-23 months in target area who have received one vitamin A capsule in the last six months.	Nhamatanda Marromeu Nhamatanda & Marromeu Gorongosa	1% Not measured		1%	25%	9% 4% 6%	24%	80%*	97% 93% 95%	119%	85%*	97% 98% 97% 60%	115%	90%*	90%*	97% 60%
9. Number of children from 6 months to under 5 years given vitamin A capsules every 6 months.[34]		0		0	0	0	n.a.	40,000*	42,106	105%	45,000*	38,410	85%	50,000*	464,000*	122,621
Increase deworming of children 10. Percentage of children 12-23 months who received a de-worming medication in the last six months.	Nhamatanda Marromeu Nhamatanda & Marromeu Gorongosa	15% 0%		15%	30%	13% 4% 8%	27%	80%*	89% 87% 88%	110%	85%*	97% 98% 98% 0%	115%	90%*	90%*	98% 0%
11. Number of children from 6 months to under 5 years given mebendazole every 6 months.[35]	Nhamatanda & Marromeu Gorongosa	0 0		0 0	24,000	34,940	146%	40,000*	39,605	99%	45,000*	50,514 0	112%	50,000*	294,000*	164,665 0
Improve immunization coverage 12. Percentage of children 12-23 months in target area with DPT3. **(SO3)**	Nhamatanda & Marromeu Gorongosa	49% 34%		49%	53%	59%	111%	65%*	40-77%[36]	62-118%	75%*	73% 34%	97%	80%*	80%*	73% 34%
13. Percentage of mothers in target area who know when a child should receive the measles vaccine.	Nhamatanda Marromeu Nhamatanda & Marromeu	7%		7%				70%*	88% 63% 77%	110%				85%*	85%*	77%
14. Percentage of mothers in target area with two or more doses of TT. **(SO3)**	Nhamatanda & Marromeu	25%		25%				50%	41-90%[37]	82-180%				75%	75%	41-90%

[34] Figure is an average for the biannual distribution
[35] Figure is an average for the biannual distribution
[36] 77% (247/319) of children 12-23 months with health cards are vaccinated, 40% (247/613) of all children 12-23 months are vaccinated. Number of cards lost unknown (believed to be a large number.)
[37] 90% (555/617) of mothers with health cards are vaccinated, 41% (555/1342) of all mothers (with or without cards) are vaccinated. Number of cards lost unknown. The truth is somewhere between these figures.

Indicator	District	Baseline	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY2000 Achieved	FY2000 Achieved Vs Target	FY 2001 Target	LOA Target	LOA Achieved
Improve control of diarrheal diseases	Nhamatanda	37%		37%		41%			16%			33%				
	Marromeu	52%		52%		47%			35%			23%				
5. Percentage of participating children with diarrhea in the last 2 weeks.	Nhamatanda & Marromeu	44%		44%	42%	44%	95%	40%	25%	160%[38]	37%	28%	130%	35%	35%*	28%
	Gorongosa	48%										48%				48%
	Nhamatanda	28%		28%		62%			73%			88%				
	Marromeu	17%		17%		93%			75%			95%				
6. Percentage of participating children with diarrhea receiving the same amount or more food. **(IR 3.2.1)**	Nhamatanda & Marromeu	22%		22%	28%	79%	282%	90%*	74%	82%	90%*	91%	101%	90%*	90%*	91%
	Gorongosa	31%										31%				31%
	Nhamatanda	41%		41%		77%			85%			93%				
	Marromeu	37%		37%		84%			81%			93%				
7. Percentage of participating children with diarrhea receiving the same amount or more breast milk. **(IR 3.2.1)**	Nhamatanda & Marromeu	39%		39%	42%	82%	195%	85%*	84%	99%	87%*	93%	107%	90%*	90%*	93%
	Gorongosa	81%										81%				81%
	Nhamatanda	55%		55%		87%			85%			96%				
	Marromeu	44%		44%		85%			89%			98%				
8. Percentage of participating children with diarrhea receiving an increased amount of liquids. **(IR 3.2.1)**	Nhamatanda & Marromeu	49%		49%	55%	86%	156%	90%*	87%	97%	90%*	97%	107%	90%*	90%*	97%
	Gorongosa	79%										79%				79%
	Nhamatanda	28%		28%		86%			100%			94%				
	Marromeu	23%		23%		82%			99%			96%				
9. Percentage of participating children with diarrhea being given appropriate oral re-hydration liquids. **(SO3)**	Nhamatanda & Marromeu	26%		26%	34%	84%	247%	90%*	99%	110%	90%*	95%	105%	90%*	90%*	105%
	Gorongosa	69%										69%				69%
20. No. of ORS Packets distributed yearly.		0		0	75,000	25,000	34%	50,000*	38,000	76%	50,000*			60,000*	235,000*	63,000
	Nhamatanda	26%		26%		73%			96%			96%				
	Marromeu	14%		14%		72%			81%			96%				
1. Percentage of the mothers in target area who know at least 2 signs of dehydration.	Nhamatanda & Marromeu	20%		20%	30%	73%	243%	80%*	89%	111%	85%*	96%	113%	90%*	90%*	96%
	Gorongosa	51%										51%				51%

[38] Measured as target divided by achieved because, in this indicator only, target percent is supposed to be diminishing.

Indicator	District	Baseline	FY 1997 Target	FY 1997 Achieved	FY 1998 Target	FY 1998 Achieved	FY 1998 Achieved vs. Target	FY 1999 Target	FY 1999 Achieved	FY 1999 Achieved vs. Target	FY 2000 Target	FY2000 Achieved	FY2000 Achieved Vs Target	FY 2001 Target	LOA Target	LOA Achieved
Improved knowledge of malaria prevention and treatment	Nhamatanda								5%							
22. Percentage of mothers in target area who know either how to prevent malaria (impregnated bed nets) or how to decrease deaths from malaria (treat within 24 hrs.)	Marromeu								24%							
	Nhamatanda & Marromeu	1%		1%				--	15%					80%*	80%*	15%
3. Percentage of children in target area with symptoms of malaria in the last two weeks who were treated within 24 hrs. of the onset of symptoms.	Nhamatanda								35%			42%				
	Marromeu	Not		Not					12%			32%				
	Nhamatanda & Marromeu	Measured		Measured				--	23%			38%		70%*	70%*	76%
	Gorongosa	40%										40%				40%
Process Indicators	Nhamatanda	0		0		15			18			18				
	Marromeu	0		0		14			16			16				
24. No. of health promoters functioning.	Nhamatanda & Marromeu	0		0	20	29	145%	27*	34	126%	40*	34	85%	40*	40*	34
	Gorongosa	0										11				11
25. No. of training sessions for health promoters per year.	Nhamatanda & Marromeu	0		0	5	6	120%	5	5	100%	5	4	80%	5	20	15
	Gorongosa	0		0								3				3
Outcome Indicators	Nhamatanda	0		0		240			288			336				
	Marromeu	0		0		224			256			277				
6. No. of group meetings per month to train volunteer health leaders.	Nhamatanda & Marromeu	0		0	280	464	166%	500*	544	109%	550*	613	111%	600*	600*	613
	Gorongosa	0										76				76
27. No. of volunteer health leaders trained twice monthly.	Nhamatanda	0		0					1,610			1,875				
	Marromeu	0		0					1,438			1,795				
	Nhamatanda & Marromeu	0		0	1,200	2,400	200%	2,500*	3,048	122%	2,750*	2,670	97%	3,000*	3,000*	3,048
	Gorongosa	0										815				815
28. No. of house visits occurring in a two week period.	Nhamatanda	0		0					11,972			17,262				
	Marromeu	0		0					13,922			24,773				
	Nhamatanda & Marromeu	0		0	12,000	21,339	178%	22,000 *	25,894	118%	23,000 *	42,035	183%	24,000 *	24,000 *	42,035
	Gorongosa	0										7,224				7,224

APPENDIX B. MONITORING AND EVALUATION, AUDITS AND STUDIES

APPENDIX B.1: REPORT: BEHAVIOUR CHANGE IN TITLE II PROJECTS

Assessment of Agricultural Message Design and Delivery
FHI Agriculture Program, Nhamatanda, Mozambique

Final Report

By Buck Deines
26 November 1999

Key Problems And Causes

Current Situation: FHI Ag. program staff appear to have a clear idea of key agricultural problems, which coincide for the most part closely with those problems identified by the Mozambican District Agriculture officials. In some cases however it appears that the root causes behind these problems may be less well understood. In general, it appears that most FHI/Moz studies have focused on quantitative information related to agricultural production and economic life within the communities served, while little qualitative information has been gathered about learner beliefs, attitudes and practices.

While FHI staff talk frequently about a number of worldview problems such as lack of integrity, honesty, character, and a lack of trust among people of the same village which impact negatively the program, these have not been considered as key problems and causes in project documents and in practice it appears that the agricultural program lacks a strategy to systematically address these issues.

Opportunities and/or Recommendations for Improvements: It is recommended that key problems and their causes be reviewed, including important worldview belief systems which govern day to day life and relationships between people in the community, i.e., religious life, family values, social values, attitudes towards political beliefs, gender relations, etc. Additionally, specific beliefs related agriculture should be explored, i.e., beliefs regarding soil fertility, crop growth (why do crops grow well for some farmers and not for others and why do they grow well in some places and not in others), agricultural labor (assisting neighbors, labor exchange and hiring labor, etc.), intercropping practices, causes of crop failures, causes of drought, causes of crop diseases, etc.

In light of this analysis, key problems and their root causes may be redefined and prioritized in terms of those which project can significantly impact, and in terms of which can have the greatest impact on improving food security.

At some point it might be advisable for FHI/Moz to develop a set of "cultural notes" which specifically address agricultural beliefs, in addition to cultural notes regarding more general attitudes and beliefs of the population served by the project.

Agricultural Curriculum

Current Situation: Although a number of high quality lesson plans were prepared in earlier years by a training unit within the project, it appears that formal agricultural extension curriculum has not been developed, or has passed out of institutional memory. Likewise, many agricultural staff members were unaware of the existence of any formal lesson plans for training. Informally curriculum for training of both program extension staff and farmers appears to be established by program managers to follow the agricultural calendar, and respond to agricultural problems identified by extension staff in the field. Weekly meetings to plan training messages are held at the regional level, and key messages to be delivered are reviewed by staff prior to their implementation in the field. Training and discussions during these meetings appear to focus on technical messages. To date there appears to be little if any evidence of the development of holistic curricula or messages which address key worldview issues impacting food security.

Opportunities and/or Recommendations for Improvements:

Development of curriculum should be prioritized for both training of extension staff, and for training of program participants. Curriculum should be holistic and prioritize KEY BEHAVIORS to be changed, state objectives, emphasize standards, define the target audience (culture, literacy rate, gender, etc.), determine general topics, and correctly arrange the subject matter. National and regional level agricultural supervisors should promote preparation of curriculum which includes holistic messages, addressing not only technical but key messages related to changing worldviews hindering food security. Steve Corbett at the FHI/IO is working on some of these messages, as are some other FHI fields. FHI/M however should not wait for that, but rather should begin to experiment in small ways with holistic message design.

Lesson Plans

Current Situation: A series of good quality lesson plans exist for training of extension staff in some areas of agricultural production. These lesson plans well organized into the following categories: Crops, Soil Conservation, IPM/Pesticides, post-harvest practices, and fruit production. Unfortunately, these training materials fell into disuse and have only recently been reintroduced to field staff and it appears that they are not being used systematically. It is likely that with minor updates these lesson plans could be used effectively. Additionally the program has lesson plans related to marketing prepared by ACDI VOCA which are excellent for training FHI extension staff, but which will require serious modifications for training at the level of program participants. The few existing lesson plans state learning objectives and practical skills to be gained, but nothing is noted related to desired changes in attitudes/practices.

Only a very few materials were found which were appropriate for training program participants. FHI/M has a very good and highly participatory set of FHI lesson plans related to crop storage training, these are written in English, but apparently have been translated into Portuguese as well. These lesson plans are directed for both the training of extension staff and FHI leader farmers, and are designed to bring out discussion of learner concerns. They are designed specifically to help learners evaluate, select, and adopt improved crop storage practices, include appropriate non-formal educational methods and principles, and have an interesting motivational strategy, based on the Master Gardener strategy used in the USA.

Opportunities and/or Recommendations for Improvements:

New lesson plans created should based upon the idea of changing attitudes and practices, rather than simply to communicate knowledge. In lesson plans for Extension staff training the target audience is noted, and sub-topics are developed well. The few lesson plans which exist for training program participants do not adequately define the target audience and/or the level of the target audience (literacy rate, etc.).

FHI lesson plans related to crop storage training are recommended as models for FHI/Moz lesson plans related to other key topics, but with two recommended modifications:

1) That they be adapted to bring out discussion of learners´ beliefs, attitudes, cultural taboos, etc.
2) That each lesson plan include a holistic messages for reflection/discussion on key worldview issues. There are many possible ways to do this, but one idea for consideration would be to include reflection on quotations from any number of sources including Gandhi, Mother Teresa, President Chissano, Dhakalama, Nelson Mandela, cultural proverbs, Biblical proverbs, local newspapers, or a variety of other sources. The key is that they lead to guided reflection and discussion of worldview issues which are relevant to program participants and to the development of their communities. These portions of the training ideally should be highly motivational and participatory. Rather than quotations or parables, pictures, skits, songs, or short stories can be used to stimulate discussion and reflection and can be used to vary the methodology. A diskette of cultural proverbs can also be ordered from the training department of the FHI International Office, this is an excellent resource of African proverbs!

In general, it is suggested that all lessons included at a minimum the following components:

i. The amount of time required to present the lesson
ii. A clear definition of objectives and methods
iii. An integration of appropriate didactic methods for non-formal education
iv. Worldview reflections to inspire, motivate and/or help the community develop a better vision for the future
v. Graphics that are appropriate to the culture and pictorial literacy of the population for which they are intended
vi. Clear opportunities to discuss learners' beliefs, attitudes, cultural taboos, and barriers to behavior change concerning the subject matter
vii. A list of required didactic materials/equipment
viii. A review of the previous lesson
ix. Adequate presentation of the lesson material
x. Questions that the facilitator will use with learners
xi. A review of key points and activities for reflection
xii. Evaluation/Assessment of what has been learned

Note: Project management is attempting to develop needed lesson plans in-house, but are hampered in that no curriculum exists to guide the process, and by their responsibilities for other areas of program management. It might be better to hire staff specifically to develop adequate lesson plans and didactic materials, or contract out the development of lesson plans. If good consultants can be found, contracting out this work could be the quickest and most cost efficient means to produce high quality materials.

Delivery of Messages via Mass Communication

Current Situation: Processes are in place to use methods other than direct, interpersonal communication with project beneficiaries to disseminate messages. For example, marketing is being promoted via radio announcements through paid radio announcements related to areas and dates where purchases of selected cash crops will be made. FHI staff express the opinion that radio messages are heard by a large percentage of agriculture program clients, informal visits with participant farmers who noted that they listen to and use market information provided via radio to assist in making marketing decisions seem to confirm this opinion.

Public information boards are also being used to display market prices to assist farmers and buyers in making marketing decisions. This appears to be an excellent mechanism for disseminating market information. Indeed, the DDA in Nhamatanda indicated that these boards are used extensively and are playing an effective role in improving marketing within the region. That praise not withstanding, several problems were encountered with these boards.

a. The information is written in chalk on unprotected boards in public areas. It appears these boards are quickly erased by community members who lean on the boards, children playing, etc. There were also reports that buyers from Beira were erasing information regarding prices in Beira so that farmers would not know what option is available by transporting their own produce to Beira.
b. Several boards were seen which contained no information. This leads to questions regarding whether or not current information is being maintained in each location.
c. During extension visits, many farmers indicated that they do not use the boards. Other farmers did not understand the purpose of the boards or understand from where the information was gathered. Some thought these were government or FHI established prices which worked against their interests by establishing prices which limited the price at which they could sell and/or reducing their ability to negotiate prices with buyers based on product quality, quantity, or other important factors.

Opportunities and/or Recommendations for Improvements:

Perhaps the use of radio could be further exploited as a channel of communication. Research into the percentage of program participants with radios, which stations are most listened to, and the time of day/week when most people listen could provide valuable insights into opportunities for using this channel of communication to disseminate extension, marketing, and worldview messages. FHI´s extension network could however easily conduct an informal survey to gain a general idea of the current situation.

Perhaps a simple mechanism could be designed and installed a protective plexiglass cover which could be inserted and LOCKED into place over the black board to protect information once it is posted. Unless something is done, this may never be an effective form of communicating important information. Additionally it is clear that extension staff need to improve educational messages regarding how this information is obtained and how it can benefit both producers and buyers. Finally, for this means of communication to be effective, current information must be regularly maintained on the boards.

Delivery of the Agricultural Messages by Extension Staff

Current Situation: Three extension training events were accompanied. Of the three, one was of good quality, and two were very poorly done. Observations:

- Two of the training sessions lasted no more 10 minutes each.
- In the case of two training events the training was held in areas without any comfortable place to sit and participants remained standing, in one of the cases, participants remained standing for nearly an hour.
- Review of previous lessons in two of the training sessions was inadequate.
- Questions in two of the sessions were almost entirely rhetorical.
- No props, flip charts, or other didactic materials were used during any of the three sessions
- None of the three extension staff members used a lesson plan. All seemed to know the messages they were to teach quite well, but teaching styles and methods varied greatly. Two of the three were very ineffective group facilitators. The educational content of the messages was correct, but not necessarily adapted to the actual situation. For example, in one case the was teaching about a monoculture maize plant populations and spacing,

but when participants were later asked how many were intercropping other crops with their maize and in such a case the recommendations provide WERE NOT appropriate for real practices of the participants.

- A quality control checklist for Ag. training sessions was being used by one supervisor.
- In one case farmers were being given a message which they have been taught annually since at least 1993, a message which they know by memory. Both participants and FHI extension staff were bored with the same messages. However, these same participants had little knowledge of the purpose of the market journal boards in their communities, and none of the participants said they used the information from the market journal. They thought it simply listed government controlled prices, and felt the market journal in some way hindered them from being able to effectively negotiate price increase with potential buyers. They also noted that buyers from Beira sometimes erase Beira prices from the boards so that local farmers will not have access to the information.
- None of the three presentations contained any holistic messages relating to key worldview issues.
- No pre/post-test mechanisms were used to determine the extent to which farmers understood the messages they were taught.

Opportunities and/or Recommendations for Improvements: Extension staff desperately need good lesson plans and related didactic materials to assist and guide them through the message delivery process. A refresher training program on non-formal education techniques for extension staff would be very helpful, and weekly extension meetings should review not only message content, but message delivery techniques. Weaker extension staff would benefit by seeing better extension staff deliver agricultural messages. Quality control checklists for supervisors evaluating training sessions should probably be revised, and supervisors should be retrained in their adequate use. An assessment should be conducted of FHI extension activities to evaluate how long it has worked in each community, what messages have been taught, and what messages are most desired/needed. (The use of pre/post-tests would also point out what is already known, as well as provide feedback regarding the degree of learning during individual training sessions.) There are many messages to be disseminated, it is a wasted opportunity if staff continue to deliver messages which people already know by memory, while failing to deliver and discuss important new messages with beneficiaries. Additionally, holistic lesson plans incorporating discussion/reflection of key worldview issues should be included, preferably in every training session.

One issue of concern is that staff seem to view these extension sessions as opportunities primarily and almost exclusively for teaching to participants, rather than view them as opportunities for participants to learn from each other, and for FHI to learn from participants. Communication is very much one-way, and very much top down. Most questions asked be extension staff are along the lines of: How should we mound up around our corn plants? How should we plant maize? How far apart between holes? What did we talk about last week? What did we learn this week? There should be many more questions along the lines of: "I noticed after three years of being taught to plant maize in holes 75 cm apart, you still plant them a meter apart. Why? What disadvantage have you found with planting them 75 cm apart? We have learned that incorporating organic matter such as grass and weeds into your soil is very important for providing food for your crops, but I notice you are continuing to burn. Why do you do that? What is it that we do not understand about your cropping system? If for some reason burning is important, are there other things we could do to get organic matter into your soils? Should we change our recommendations? Is there a another good practice to incorporate organic matter that you prefer? At what price did you sell your crops last month? Who did you sell them to?"

Closing Comments

I closing I would like to note that in conducting this review I have focused almost exclusively on what can be improved, rather than on what has been accomplished. Clearly from the Results Reports I have seen, as well as from my observations in the field, the program has had a tremendous impact. The essential structure for the

extension program seems sound and extension staff visited knowledgeable about technical messages. Additionally, the Ag. extension staff are genuinely concerned and motivated to help the farmers they serve, and they have clearly gained a tremendous amount of trust and respect among the farmers. Furthermore, it is obvious that farmers have learned a great deal from FHI and that they value what they have learned.

One of the personal highlights of this visit for me was seeing FHI staff in the community of Ramos assisting farmers to market bags and bags of produce. I remember Ramos quite differently. Back in 1993 it was packed with refugees, burned up by drought, and people were so hungry they were slipping out at night to dig up chemically treated seed their neighbors had planted in their fields. I remember FHI distributing seeds and tools to the population at that time, and providing training regarding improved agricultural practices. To see the results of those efforts, and now see FHI/M helping many of those same families increase their incomes by marketing cash crops in excess of their subsistence needs, truly warms my heart. There is no doubt in my mind that the FHI/M agricultural program has had, and continues to have, a TREMENDOUS impact among the farmers it serves. You have a very dedicated staff, and it was a privilege for me to be able to spend this time with all of you.

The following is a compiled and summarized list of key interventions/problems/causes identified through review of project documents and interviews with project staff and with District of Agriculture (DDA) staff in Nhamatanda.

1) Marketing -- Inability of farmers to effectively market agricultural produce. Key causes include:
   a. Farmers primary interest is to provide food for their families through production, they think little about marketing surpluses until subsistance needs are met. Farming is not seen as a business.
   b. Poor quality of produce for market does not attract buyers.
   c. Lack of transport and poor road infrastructure resulting in high transportation costs and a shortage of available transportation when most needed.
   d. Farmers do not know how to prepare or implement business plans.
   e. Farmers do not understand basic principles of marketing, including commodity selection, quality requirements, quantity requirements and quality control, etc.
   f. Farmers lack necessary organization to effectively participate in the marketplace.
   g. Farmers are often illiterate and unable to prepare or understand even simple contract.
   h. Farmers do not know how to prepare and negotiate marketing agreements with buyers.
   i. Buyers mistrust ability of farmers to provide contracted goods in terms of quality and quantity.
   j. Farmers lack simple accounting skills.
   k. Existing farmer associations are largely weak, ineffective, and/or corrupt.
   l. Farmers lack knowledge related to the forming and legalizing associations.
   m. Farmers mistrust farmer associations.
   n. Agronomic knowledge of alternative commercial crops.

2) Farmers lack basic knowledge related to improved agronomic practices for most crops, typically in the following areas:
   a. Land preparation practices & tillage
   b. Fertility management: including the use of mulches, incorporation of organic matter, crop rotation practices, use of green manure, and proper use of fertilizer/manure. Additionally, chemical fertilizers are not readily available locally (even in major towns such as Nhamatanda and Marromeu). Lack of availability to pay is due in part to lack of ability of most farmers to pay for these inputs, which in turn is related to a lack of access to agricultural credit, which is due in part to a lack of farmer collateral, etc.
   c. Burning off of organic matter and failure to failure to incorporate organic matter.
   d. Recommended crop rotation practices
   e. Intercropping recommendations including plant spacing and planting populations.

f. Use of compost.
g. Mulching.
h. Control of improved soil erosion practices.
i. Seed production and selection practices.
j. Seeding rate, spacing, and density.
k. Improved cultural practices.
l. Control of pests and diseases.
m. Improved post-harvest/storage techniques.

3) Agricutural input supplies are very limited on non-existent due to the following reasons:
   a. Farmers lack capital required for purchase of inputs.
   b. Farmers lack credit for purchase of inputs.
   c. Existing merchants are not trained in the area of input supply.
   d. Potential new merchants of inputs require business management training in the following areas:
      - Development of business plans
      - Business management
      - Costing, pricing, storage, and inventory of ag. Inputs
      - Product selection and marketing strategies
      - Control of stock, simplified accounting

APPENDIX B.2: FINAL REPORT: APICULTURE 2000 GORONGOSA MOUNTAIN PROJECT (ACDI/VOCA)

FINAL REPORT

I. EXECUTIVE SUMMARY

Project number: 081009

Volunteer: Marty Hardison

Host organization: Food for the Hungry International

Country of Assignment: Mozambique

Dates of Assignment: 1 September 2000 to 18 September 2000

SCOPE OF WORK

Original Scope of Work:
Provide a two week apiculture workshop. Intended foci to be honey harvesting and processing, top bar hive design, use and management, queen rearing, and selective breeding, and colony increase. The intended participants were existing topbar beekeepers in the Gorongosa region. Sessions were to include both and instructional and applied bee keeping components.

Actual Scope of Work:
There were some additions to the topics covered and a modification of the instructional schedule. A unit on fabrication and use of protective equipment was added. Also added was a unit on basic bee biology. The schedule was modified to provide time for experimentation with hive production and for intensive training of the apiculture specialist in the process of queen rearing. Also added to the original scope was the establishing of a source for affordable hive construction materials. Some time was invested in the production of prototype hives utilizing inexpensive mill off cuts. Two areas of intended instruction were scaled down and did not include practical application sessions. Due to time constraints queen rearing was presented in lecture and graphic form but only one actual queen-raising project was done. Demonstration of colony management was also limited to verbal and graphic instruction due to the scarcity of topbar hives in use.

III. RECOMMENDATION SUMMARY

a. Recommend the continuation of foundation bee keeping instruction by FHI staff in Gorongosa.
b. Recommend the practical demonstration of queen rearing be carried out in each of the four locations where only verbal and graphic instruction was delivered.
c. Recommend apiculture specialist Feliciano Picando, be encouraged and assisted in the establishment of a multiple colony apiary.
d. Recommend a means of veil manufacture and netting supply for honey processing be established.
e. Recommend a hive manufacturing enterprise be developed with FHI providing the acquisition and transportation of quantities of saw mill off cuts.

f. Recommend an electric circular saw be acquired to facilitate and make more safe the resizing of saw mill off cuts lumber.
g. Recommend an ACDI/VOCA volunteer be sought to deliver instruction in basic bee biology.

BODY OF THE REPORT

Host organization description:
Food for the Hungry International (FHI) is a Geneva-based, USAID-funded NGO, that has provided agricultural services to parts of the Gorongosa district for the past five years.

Prioritized list of problems addressed.

Problem set

a. Issue/problem
Farmers have a working familiarity with bees but their means for honey production and colony management are limited by a lack of protective equipment.

Whether top bar hive or bark hives are employed the lack of protective equipment requires the beekeeper to harvest honey at night utilizing copious amounts of smoke. Honey collected in this manner will be of erratic quality. No quality control is possible under these conditions. It is as if a tailor were required to sew only in the dark. The results in both cases are far below what is possible.

Another area impacted by the lack of protective equipment is colony management and queen rearing. To maximize productivity timely interventions are necessary. These can only be effected by observation of the bees. Bees cannot be observed without protective equipment.

b. Recommendation
A veil manufacturing enterprise be established.

c. Action
Each participant assisted in the production of his/her own protective veil. 81 veils in all were distributed and a few were kept by FHI staff members. The sewing on most of the veils was done by a local tailor in Gorongosa.

Veil and/or veil making materials should be made available for purchase at Gorongosa. This need could be filled by encouraging an independent enterprise of veil manufacture and sale.

Suggest the enterprising Beira resident João Madera be encouraged to set up a veil making enterprise. He has contacts in the fabric and garment industry and is familiar with the veil making process and specifications.

d. Anticipated impact
Adequate protective equipment is the foundation for effective colony management and the effective means for quality control of honey produced. One notable difference in honey collected is that less smoke can be used allowing the honey to be free of undesirable flavor contamination produced by smoke saturation. With veils in common use bee keeping techniques can be expected to change improving both productivity and quality of honey produced.

Problem set:

a. Issue/problem

Honey from any source cannot be processed effectively without appropriate straining material being available. At two of the sited visited a large crop of honey was collected. The honey produced was rejected for retail sale because of the presence of foreign material in the honey. The farmers affected were predictable frustrated and angry at the financial loss this caused.

b. Recommendation

1/2 meter squares of cloth mesh suitable for processing honey be made available for purchase.

c. Action

Instruction in effective honey processing complete with graphic illustrations has been given to each participant. A supply system could be set up in conjunction with veil manufacturing. The mesh needed is the same as that used in veil fabrication.

d. Anticipated impact

Honey delivered for bottling and marketing will be free of an unacceptable amount of foreign matter. This is one of the largest quality control issues facing the honey marketing program.

Problem set

a. Issue/problem

Control of supply and quality of final product is needed.

b. Recommendations

A climate controlled bottling and storage room be established.

c. Action

1. Achieving a higher quality uniform product in market quantity will require a facility for packaging, labeling and storing a supply of honey.
2. This could be an enterprise run by FHI or it could be privately owned.
3. The facility would be equipped with a bottling tank capable of holding not less than 20 liters of honey.
4. Honey placed in the tank should be subject to a final filtration.
5. Honey should be delivered through a gate valve at the bottom of the tank.

d. Anticipated impact

1. The final quality and supply of retail honey will be improved. Sales and consumption of honey should increase.
2. Filling retail containers from a gate valve limits spillage. Less honey ends up on the outside of the container and the retail package is more attractive.
3. A gate valve at the bottom of the tank allows containers to be filled without getting any foam into them. It also decreases the chance that foreign matter will end up in the retail container.

Issues of resource

Problem set:

a. Issue/problem

The acquisition of a sufficient supply of mill off cuts transported to Gorongosa.

b. Recommend

FHI commit to purchasing and transporting large loads of mill off cuts to Gorongosa at needed intervals.

c. Action

1. Initial contact with the mill owner at Nhamatanda was established. An agreement to purchase subsequent loads of off cuts should be made. Loads could be delivered when trucks are going to Gorongosa to collect farm produce.
2. No price was agreed upon for the off cuts obtained. The mill owner donated them for experimentation in exchange for one of the finished hives.
3. It is anticipated that the cost will be nominal and within the means of many farmers.

d. Anticipated impact

A relatively small percentage of farmers have even one topbar hive. They have expressed enthusiasm about their use but have also stated that the cost of a hive would have to be around 75,000 mets. The closest we had come to that figure previously was a hive produced for around 150,000 mets built out of wood processed at the mission.

Suggestion—A quantity of wood intended for topbar production was confiscated by the authorities on Thursday morning, 14 September 2000. The wood was taken illegally from the forest. It is suggested that this source of wood no longer be utilized as it contributes to the defeat of one of the underlying purposes of the apiculture program. That purpose is to protect the forest from unnecessary destruction.
Instead of depending on the mission for wood for topbars it is further suggested that saw mill seconds boards be purchased to use in topbar production.

The necessity for intervention by FHI in the matter of acquiring and transporting off cuts is vital. Individuals cannot purchase small quantities of this material. It is sold in large lots weighing several tons. This condition places the material out of reach for anyone who does not have the means to buy and transport such a load. If this recommendation is acted upon the cost of individual hives will be greatly reduced and general use of the topbar hives will increase dramatically.

Issues of production

Problem set:

a. Issue/problem

A bench saw, drill, and a few other tools have been provided by the ACDI/VOCA volunteer for this project. The tools have assisted greatly in the production of topbar equipment. One more tool is needed, a 7 ¼ inch circular saw, for efficient hive building. Also needed is electricity to operate the power equipment, safety for those operating it, and care that the equipment not be misused.

b. Recommendations

The present ACDI/VOCA volunteer will acquire the needed circular saw in the U.S. for shipment to Mozambique. A small number of individuals could be designated to operate the power tools for the safety of the people and the equipment.

Electricity and maintenance costs including replacement should be factored into the cost of the hives so that the enterprise can be on going. Hive production could not exist at this time at any significant volume without support from FHI for material acquisition, electricity, and transport. However, the operation could be partly privatized if costs were factored into the price of the hives. Labor could be contract.

c. Action

FHI should commit to acquiring truck loads of off cuts delivered to Gorongosa for a specific pre established time period. This time period should be for at least one year to give enough time to establish a regular supply of hives. Specific individuals should be commissioned to operate the machinery and build hives. The builders should be supervised by FHI staff. Day to day production should not rely on FHI staff personnel. They have a broader mission to fulfill.

d. Anticipated impact

Hives will finally be available in sufficient quantity and at feasible cost to enable farmers to adopt the topbar hive as the usual means of honey production. The long range effect should be a dramatic increase in the quality and quantity of honey produced and an ultimate increase of incomes.

Issues of education

Problem set

a. Issue/problem

Farmers development staff, and agricultural students need more in depth information about bees and bee keeping.

b. Recommendation

Site apiculture specialist at Gorongosa, Feliciano Picando, should be encouraged to build his personal apiary to at least 10 hives. This process will precipitate both refinement of hive production techniques and his overall competence and understanding of bee keeping. A need has also been expressed for an ACDI/VOCA volunteer to concentrate on more in depth education about bees. Finally, the farmers are beginning to express a desire to learn more about the bees themselves.

c. Actions

A short unit was presented along with graphic examples of the bee life cycle. More courses of this type should be taught by Feliciano as he increases his own capacities a master bee keeper.

A practical demonstration of queen rearing should be carried out in each of the teaching site locations. This process requires frequent monitoring and a total of about 30 days to complete. Felicano is ready to do those demonstrations.

An ACDI/VOCA volunteer should be sought specifically for bee life cycle education. This volunteer could be utilized both in Beira at the agricultural institute and in Gorongosa for information seminars.

d. Anticipated impact

A higher level of bee keeping competence will lead to beneficial developments in the bee keeping industry of Mozambique.

Key Contacts

- Nicky Benn, Project Director - ACDI/VOCA Mozambique Tel: 329412

- Cristiano Tiamo, Program Assistant ACDI/VOCA Mozambique Tel: 329412
- Adelino Jorge , Director at FHI Gorongosa Tel: 352152
- Feliciano Picando, Apiculture Specialist at Gorongosa Tel: 352152
- João Madera, veil and fabric consultant – c/o FHI Beira Tel: 352152
- Colin Swinton – Bee keeper & saw mill owner, TTC Lda, Manga Tel: 303022
- Nhamatanda saw mill (opposite FHI office)
- Carlos Figurelo – Saw mill owner, Manga

Attachments (NOT INCLUDED IN FHI CSR4 SUBMISSION)

- Hive design
- Solar wax melter design and veil specifications
- Honey harvesting
- Queen raising

VI CONFIDENTIAL MEMO TO ACDI/VOCA

1. Confidential information.

The lack of follow through by FHI that occurred after last year's project is of concern. Most of the proposed actions recommended in this report were discussed at that time. They were feasible if they had been pursued. I am more confident this year because I have seen Adelino follow through on difficult problems. He has the persistence and commitment to get results.

2. ACDI/VOCA follow-up action.

- A bee educator should be sought for the next phase of the apiculture program
- I think it would be a good idea to look into the progress achieved at Gorongosa couple of times during the year. This would provide an opportunity to encourage and to even help strategize concerning any problems that have arisen.

3. Promises

I will buy the needed circular saw and send it to ACDI/VOCA Washington in hopes that it will be imported to Mozambique. There is a minor part missing to the bench saw that I brought. That part will be sent as well.

I requested that Christine, a Peace Corps volunteer at the mission school in Gorongosa, requisition a Spanish language copy of Peace Corps Manual M-17, Small Scale Beekeeping by Curtis Gentry. Subsequent to that request I also asked Jillann Richardson, ACDI/VOCA micro finance specialist, to request a copy of that publication be sent up to Feliciano at Gorongosa. Hopefully one or both of those requests will produce a valuable resource for Feliciano's continued development.

I will send some candle wicking and a gate valve for the proposed honey packing project.

On behalf of the projected need for a ACDI/VOCA volunteer to fill training assignments next year I will contact Les Crowder who I consider an ideal candidate.

APPENDIX B.3: REPORT: BEHAVIOR CHANGE COMMUNICATION IN FHI TITLE II PROJECTS - MATERNAL/CHILD HEALTH AND NUTRITION COMPONENT, MOZAMBIQUE

Tom Davis, MPH, Consultant to FHI

Mozambique

1. **This project has excellent results in terms of knowledge and practice changes (see R2).**
2. No assessment has been done on impact (changes in nutritional status) at this point in the project. Given the large changes in knowledge and practice indicators, **I would suggest that FH do a smaller nutritional anthropometry study of children 6-12m of age (300-400 cases, using the same groups chosen during the 6m monitoring).** This is the age group in which the most impact will be seen if there are changes. (They would need to return to the baseline data in order to analyze it looking at this particular age group.)
3. **FHI/Moz's model is very straightforward and simple, but with excellent coverage. Use of volunteers is excellent.** The Promoters told us that the reason they think that the model works is that the *Volunteer mothers* really know the situation in each household with which they work. Also, the *Volunteer mothers* can encourage moms to get the specific services that their children need (rather than generally promoting the use of health services). Mothers see the results of the program**. During the final evaluation, I would suggest that FH include some assess client satisfaction**, probably focus groups with mothers in the project area.
4. **FH staff is not only working with mothers, but has begun working with political/cultural community leaders, school teachers, traditional birth attendants, church groups, and women's groups.** It is good that **fathers and other people in the area are not excluded from education that Promoters and *Volunteer mothers* do, as well.** At this point, this has been limited chiefly to the cholera messages. I would encourage FH to begin doing this more systematically with the messages used for each intervention, so that FH gains their support for the project objectives, and they will begin to share this information with the people that they serve (e.g., students and pregnant women).
5. At some point, FHI should **consider developing another cadre of Promoters who would work more intensively with the TBAs using the current and new flipcharts.** (These Promoters would need motorbikes since the TBAs would be farther flung.) **Radio** may not be a worthwhile media for getting out messages in this area since it appears that few mothers have radios. (Buck Deines mentioned a study done several years ago that documents what percentage of people have radios. FH should use this study to confirm whether or not functioning radio ownership is low.)
6. **FHI/Moz should develop a set of "cultural notes"** at some point, **ethnographies of the main cultural groups in the area**. These could be given to expatriate and non-local staff when they are hired so that they can better understand the local cultures and use that information effectively in educational materials, and add to it during their time with the organization. Educational materials, at this point, do not reflect a very thorough understanding of local culture. An additional way to improve this would be to **have more Mozambican staff involved in the production of lesson plans and flipcharts**. The process should be thought out a bit more and institutionalized. **There should be a policy describing who will be consulted as each new lesson plan and flipchart is developed, how it will be pretested, etc**. Rapid pretesting should be covered in the next ISA workshop. Pretesting of the existing materials was minimal, but apparently few problems have arisen due to this.
7. Overall, **lesson plans are well done. Learning objectives should be added** to lesson plans. I may suggest other small changes in content at some point. So far there is not a process in place for updating the content and methods, but that should be specified at some point (writing a policy on it).
8. The **Promoters should do more spot checks of *Volunteer mothers'* work, and should have a form to report the results of this**. At this point, Felipe is responsible for this, but there are over 2,000 *Volunteer mothers* to supervise. There should be a form that the Promoters use when doing a "spot check" of the *Volunteer mothers'* work, as well. This form should allow them to report on which of the key messages the mother knows (relative to the recent training), how the mother feels about the *Chefe's* visits, etc.

9. **Mothers should all know where *Volunteer mothers* live, and their homes should probably be marked** (e.g., with a sign). They are a local resource, but mothers do not seem to seek them out for advice very often.
9. **Promoters should begin to receive lesson plans that are more holistic.** Promoters are open to this, and are participating in Bible studies already. Promoters say that the *Volunteer mothers* would be open to more discussion of biblical principles of development, as well.
10. **Promoters should model the dialogue between *Volunteer mothers* and mothers in each training session** (rather than doing group teaching). Through this, the *Volunteer mothers* can mirror the reactions, responses, and attitudes that the mothers that they work with are showing. This will give the Promoter a chance to coach the *Volunteer mothers* more on their teaching techniques and how to promote behavior change (e.g., negotiating, using examples spontaneously, bringing in role models, tying what is seen to the content of the lesson). **At this point, there is very little "trainer of trainers" type of education going on.** They should also add in questions to the lesson plan as a segue to talk about some of this information (e.g., "what would you tell the mom if she says that firewood is too expensive to boil water?) **Promoters need to use more verification questions**, too, to assure that the *Volunteer mothers* understand the main messages (from memory), **and ask the *Volunteer mothers* about the practicality of certain messages**, helping them to problem solve where barriers exist.
11. Promoters mentioned that sometimes the *Volunteer mothers* do not arrive or arrive late for meetings, and during the rainy season, it is sometimes difficult to find a dry (covered) place to meet. This does not seem to be a major problem, though. Their reports show that about 85% of *Volunteer mothers* are attending the biweekly meetings, but the Promoters claim to do follow-up home visits, educating the Volunteer mothers in their homes, for almost 100% of the Volunteer mothers who miss a meeting.
12. ***Volunteer mothers* need to use verification questions after teaching the mothers a lesson, summarize the key messages at the end of the session, use questions to discover what blocks the mother might have to doing the behavior** (e.g., lack of firewood), **help mothers to work through barriers (or modify messages), get mothers to commit to certain actions, feedback information to the Promoters about the practicality of certain messages** (e.g., water purification), **and discuss with the Promoters the problems that they are having in specific households** (e.g., the mother wants to make a change, but the husband disapproves, the mother has tried exclusively breastfeeding her five month old, but the child cries all the time). ***Volunteer mothers* should be given a specific lesson (using a lesson plan) on how to teach mothers,** including the elements mentioned above that are now missing. This training could be extremely holistic since it deals with interpersonal relationships, principles of adult nonformal education (which Jesus used), how to teach, etc.
13. **In general, Promoters should begin to make sessions less "generic" and more geared to the particular needs of each group** (same educational messages, but more focus on the problems that each particular group of *Volunteer mothers* encounter as agents of change. They need to **foster a climate where *Volunteer mothers* can share problems, failures, tough cases, and problem solve together** on how to accomplish the project objectives.
14. **The Supervisors** (e.g., Barb and Martha) **need to be using an updated QI checklist for education with the Promoters**. I have discussed changes to their checklist, but these changes have yet to be implemented. **The checklist should be more detailed**, as I have suggested before. Most Promoters are scoring 100% after two or three uses of the checklist, and yet the education I saw being done was very good, but not "stellar."
15. **The Promoters should be using a QI checklist on individual counseling with the *Volunteer mothers*, helping them to improve their counseling skills over time.** They will probably need to do some home visits themselves to become good at this (preferably to mothers who are more resistant to changes). I have given Susan a sample checklist in English, which will need to be translated into Portuguese.
16. Low posttest scores of the Promoters are not common, but **FHI/Moz should develop a protocol for dealing with low posttest scores.** Generally, posttest scores have improved over time (i.e., for the posttest for the first intervention introduced, all scores were over 50%, then all were over 80% for the second intervention, then all were over 87%). Promoters with low posttest scores should be individually retrained on most important information, and given a chance to retake the posttest (or take it several times). Other Promoters with very high

scores could be used to do this retraining. If scores do not ever come up, consider getting another Promoter (but only after higher-level staff have attempted to do the retraining).

17. **Consider giving special incentives to *Volunteer mothers* for seniority, in addition to giving them every 9-12m as is being done presently**. We also discussed (with the Promoters) the possibility of having the participant mothers throw "their" *Chefe* a party once a year.
18. FH should work to **find other opportunities for the mothers in this highly developed network**. The mothers with whom I spoke were interested in working to get water to their communities (hand pumps) and small health posts. Other possibilities I have seen in other settings would be to have another NGO work with our structure to do a microcredit project, especially focused on health-related products (e.g., selling soap), bible studies, and empowerment/leadership training.
19. **Improve mechanism for finding newly arrived mothers** since there is a lot of mobility in the population. One option would be to have Volunteer mothers do a "sweep" of their area to find new households with preschool children. Include question on the final KPC on how long the mother has been in the community (with a >6m absence, they could count them as "new"), so that we can analyze the data with and without the mothers who have had little exposure to our work.
20. It was a pleasure working with FHI/Moz's staff. They are all very committed to the project, enthusiastic, and open to improvements.

-- Tom Davis, MPH

APPENDIX C: EXPENDITURE REPORT

APPENDIX C1: EXPENDITURE REPORT FOR FY00 AND FORECAST EXPENDITURE FOR FY01

Line Item	Monetization Proceeds	s.202(e) Grant	PVOII Funding	FHI match for PVOII	Total
FY 00 Opening Balance	**1,029,784**	**12,636**	**346,111**	**-**	**1,388,531**
FY 00 Income - New Funds	1,012,929	149,000	101,523	41,863	1,305,315
FY 00 Income -Interest	34,428	-	-		34,428
Total FY Income	**1,047,357**	**149,000**	**101,523**	**41,863**	**1,339,743**
Total Funds Available in FY 00	***2,077,141***	***161,636***	***447,634***	***41,863***	***2,728,274***
Expenses					
Personnel	472,413	89,438	225,654	25,053	812,558
Training	60,146	1,350	1,222		62,718
Travel and Transportation	143,762	1,620	7,875	3,835	157,092
Other Direct Costs	83,959	7,695	24,561		116,215
Equipment & Supplies	109,158	252	7,796	1,101	118,307
Allocated Program Costs	257,445	29,543	80,119	8,936	376,043
	1,126,883	**129,898**	**347,227**	**38,925**	**1,642,933**
NICRA	128,383	15,085	44,069	2,938	190,475
Total Expenses FY 00	**1,255,266**	**144,983**	**391,296**	**41,863**	**1,833,408**
Closing Balance FY 00	**821,875**	**16,653**	**56,338**	**-**	**894,866**

FY 2001 Opening Balance	**821,875**	**16,653**	**56,338**	**-**	**894,866**
FY 01 Income-Estimated New Funds	1,150,614	139,430	375,230	449,676	2,114,950
FY 01 Income -Estimated Interest	10,000	-	-		10,000
Total FY 01 income	**1,160,614**	**139,430**	**375,230**	**449,676**	**2,124,950**
Total Funds Available in FY 01	***1,982,489***	***156,083***	***431,568***	***449,676***	***3,019,816***
FY 01 Expenses					
Personnel	681,438	77,693	167,230	174,247	1,100,608
Training	134,930	-	14,650	15,265	164,845
Travel and Transportation	232,442	16,435	36,440	37,969	323,286
Other Direct Costs	146,284	13,110	60,100	62,622	282,116
Equipment & Supplies	194,907	2,200	14,100	14,692	225,899
Allocated Program Costs	417,028	32,831	97,868	101,974	649,701
	1,807,029	**142,269**	**390,388**	**406,768**	**2,746,454**
NICRA	175,460	13,814	41,180	42,908	273,362
Total Expenses FY 01	**1,982,489**	**156,083**	**431,568**	**449,676**	**3,019,816**
Closing Balance FY 01	**-**	**-**	**-**	**-**	**-**

APPENDIX C2: LOA EXPENDITURE REPORT (INCLUDING FORECAST EXPENDITURE FOR FY01)

Line Item	Monetization Proceeds	s.202(e) Grant	PVOII Funding	FHI match for PVOII	Total
LOA Funds Movement	**-**	**-**	**-**	**-**	**-**
LOA Income	5,939,507	683,312	2,198,666	726,000	9,547,485
LOA Interest	203,293	-	-		203,293
Total Fund Available in LOA	**6,142,800**	**683,312**	**2,198,666**	**726,000**	**9,750,778**
Expenses					
Personnel	1,919,435	388,277	1,127,251	141,925	3,576,888
Training	345,188	1,481	33,772	71,057	451,498
Travel and Transportation	911,618	34,796	83,077	93,760	1,123,251
Other Direct Costs	378,826	36,686	158,531	30,300	604,343
Equipment & Supplies	674,350	8,615	92,319	164,064	939,348
Allocated Program Costs	1,390,622	155,997	515,685	157,766	2,220,070
	5,620,039	**625,852**	**2,010,635**	**658,872**	**8,915,398**
NICRA	522,761	57,460	188,031	67,128	835,380
Total Expenses LOA	**6,142,800**	**683,312**	**2,198,666**	**726,000**	**9,750,778**
Closing Balance FY 2001	**-**	**-**	**-**	**-**	**-**

APPENDIX C3: EXPENDITURE REPORT FOR FY2001 (EXPECTED) AND LOA (INCLUDING EXPECTED FY01) BY PROGRAM

Agriculture

FY2001	*Funding Source: Monetization TitleII*				*Funding Source: PVOII*				LOA - Expenses		
Line Item	Original Budget	Current Estimate	Difference	%	Original Budget	Current Estimate	Difference	%	Monetiz. (Title II)	PVOII	Total
Personnel	337,325	435,012	97,687	29.0	477,936	167,230	(310,706)	(65.0)	1,440,481	1,127,251	2,567,732
Training	120,888	58,440	(62,448)	(51.7)	12,337	14,650	2,313	18.7	177,771	33,772	211,543
Travel	250,740	178,782	(71,958)	(28.7)	34,247	36,440	2,193	6.4	720,801	83,077	803,878
Other Direct Costs	74,154	117,190	43,036	58.0	51,537	60,100	8,563	16.6	284,642	158,531	443,173
Equipment/Supplies	225,216	83,520	(141,696)	(62.9)	83,870	14,100	(69,770)	(83.2)	419,435	92,319	511,754
Allocated Program Costs	302,488	261,883	(40,605)	(13.4)	197,978	97,868	(100,110)	(50.6)	1,011,117	515,685	1,526,802
NICRA	181,122	110,192	(70,930)	(39.2)	123,367	41,180	(82,187)	(66.6)	373,526	188,031	561,557
	1,491,933	1,245,019	-175,984	(16.5)	981,272	431,568	-467,517	(56.0)	4,427,773	2,198,666	6,626,439

Health and Nutrition

FY 2001	*Funding Source: Monetization TitleII*				*Funding Source: s202(e)*				LOA - Expenses		
Line Item	Budget	Current Estimate	Difference	%	Budget	Current Estimate	Difference	%	Monetiz. (Title II)	s202(e)	Total
Personnel	167,799	246,425	78,626	46.9	65,388	77,693	12,305	18.8	478,954	388,277	867,231
Training	38,367	76,490	38,123	99.4	-	-	-		167,417	1,481	168,898
Travel	68,338	53,660	(14,678)	(21.5)	12,459	16,435	3,976	31.9	190,818	34,796	225,614
Other Direct Costs	16,703	29,094	12,391	74.2	26,486	13,110	(13,376)	(50.5)	94,184	36,686	130,870
Equipment/Supplies	75,687	111,387	35,700	47.2	-	2,200	2,200		254,915	8,615	263,530
Allocated Program Costs	110,012	155,145	45,133	41.0	31,299	32,831	1,532	4.9	379,505	155,997	535,502
NICRA	68,552	65,268	(3,284)	(4.8)	19,504	13,814	(5,690)	(29.2)	149,235	57,460	206,695
	545,458	737,469	192,011	35.2	155,136	156,083	947	0.6	1,715,028	683,312	2,398,340

Program Objectves	Funding Source					Commodity Requirement
	Monetization	s.202(e)	PVOII	PVOII match	Total	
FY 00 Resources						
Agricultural Productivity						
Research	85,858		39,130	-	**124,988**	512
Extension	523,499		234,778	25,118	**783,395**	3,124
Crop Marketing & Storage	171,715		78,259	16,745	**266,719**	1,025
Apiculture(Bee keeping)	85,858		39,129	-	**124,987**	512
Total Agricultural Productivity	***866,930***		***391,296***	***41,863***	***1,300,089***	***5,173***
Health/Nutrition	388,336	144,983			**533,319**	2,317
FY 00 Total Resource	**1,255,266**	**144,983**	**391,296**	**41,863**	**1,833,408**	**7,490**

Program Objectves	Funding Source					Commodity Requirement
	Monetization	s.202(e)	PVOII	PVOII match	Total	
LOA Expenses						
Agricultural Productivity						
Research	423,685		209,624	-	**633,309**	2,696
Extension	2,009,262		776,207	435,600	**3,221,069**	12,788
Rural Enterprise & Assist. Devt.	462,725		484,628	108,900	**1,056,253**	2,945
Crop Marketing & Storage	1,434,694		704,027	181,500	**2,320,221**	9,131
Apiculture	97,406		24,180	-	**121,586**	620
Total Agricultural Productivity	***4,427,772***	***-***	***2,198,666***	***726,000***	***7,352,438***	***28,180***
Health/Nutrition	**1,715,028**	**683,312**			**2,398,340**	10,915
LOA Total Expenses	**6,142,800**	**683,312**	**2,198,666**	**726,000**	**9,750,778**	**39,095**

APPENDIX C5: MONETIZATION FUND PIPELINE ANALYSIS FY97-FY00

	R.O.E	Proceeds Rcvd MTS	Interest in MTS	Total Income in $	Total Exp $	Expense Mts	Cummulative Funds Balance in MTS	Cummulative Funds Bal in US$	Translation Loss
October, 1996	11,286.15	-		-	-	-	-	-	-
November	11,286.15			-	-	-	-	-	-
December	11,286.15			-	-	-	-	-	-
Oct'96 - Jan'97	11,286.15	871,998,714		77,263	-	-	871,998,714	77,263	-
February	11,286.15			-	-	-	871,998,714	77,263	-
Feb - Apr'97	11,286.15	1,948,826,437		172,674	19,328	218,136,626	2,602,688,525	230,609	-
April	11,286.15			-	-	-	2,602,688,525	230,609	-
May & June	11,306.25	2,338,021,317		206,790	42,724	483,047,150	4,457,662,692	394,675	410
June	11,306.25			-	-	-	4,457,662,692	394,675	820
July	11,362.50			-	-	-	4,457,662,692	394,675	3,182
July & August	11,362.50	2,436,485,268	124,972,603	225,431	194,147	2,205,992,573	4,813,127,990	425,959	5,544
September'97	11,413.00	1,800,740,581	91,564,384	165,108	85,704	978,141,723	5,727,291,231	505,363	3,542
Total		**9,396,072,317**	**216,536,986**	**847,266**	**341,903**	**3,885,318,072**			
Fund Balance		**5,727,291,231**		**505,363**					
October,1997	11,463.50	883,536,618		77,074	-	-	6,610,827,849	582,437	5,752
November	11,463.50	1,514,763,816	20,942,466	133,965	-	-	8,146,534,131	716,402	5,752
December	11,463.50	407,609,915	57,657,531	40,587	246,377	2,824,338,677	5,787,462,901	510,612	5,752
January	11,463.50	1,605,847,693	43,397,260	143,869	83,663	959,066,809	6,477,641,045	570,819	5,752
February	11,483.70		17,950,685	1,568	105,200	1,208,083,195	5,287,508,535	467,187	6,751
March	11,493.80	2,775,800,561	86,610,381	249,040	109,409	1,257,529,700	6,892,389,777	606,817	7,156
April	11,514.00		39,890,411	3,465	106,515	1,226,416,529	5,705,863,660	503,766	8,208
May	11,534.20	2,358,834,613	18,090,685	206,076	115,047	1,326,979,623	6,755,809,334	594,795	9,076
June	11,716.00		70,475,723	6,015	110,103	1,289,963,957	5,536,321,100	490,708	18,164
July	11,766.50	2,043,067,180	39,940,441	177,029	135,984	1,600,061,006	6,019,267,715	531,752	20,192
August	11,817.00	2,253,397,843	18,050,685	192,219	125,768	1,486,203,442	6,804,512,801	598,203	22,379
September'98	11,867.50	3,326,173,013	69,930,944	286,168	116,595	1,383,695,905	8,816,920,853	767,776	24,829
Total		**17,169,031,252**	**482,937,212**	**1,517,074**	**1,254,662**	**14,562,338,842**			
Fund Balance		**8,816,920,853**		**767,776**					

Food for the Hungry International / Mozambique **FY 2000 Results Report**

	R.O.E	Proceeds Rcvd MTS	Interest in MTS	Total Income in $	Total Exp $	Expense Mts	Cummulative Funds Balance in MTS	Cummulative Funds Bal in US$	Translation Loss
October,1998	11,892.75	2,008,496,110	39,890,411	172,238	137,508	1,635,352,070	9,229,955,304	802,506	26,406
November	12,044.25	2,819,595,805	17,950,680	235,593	102,071	1,229,367,349	10,838,134,439	936,028	36,168
December	12,064.45	3,443,389,539	71,039,950	291,305	71,838	866,687,262	13,485,876,666	1,155,495	37,675
January	12,125.00		106,342,460	8,771	86,671	964,070,875	12,628,148,251	1,077,594	36,097
February	12,135.00	946,662,185		78,011	138,189	1,538,390,355	12,036,420,081	1,017,416	25,540
March	12,075.00	1,333,434,400	116,545,821	120,081	117,294	1,299,318,300	12,187,082,002	1,020,204	10,921
April	12,115.00	1,128,662,352		93,162	85,793	953,523,190	12,362,221,164	1,027,572	7,166
May	12,140.00		108,739,730	8,957	102,884	1,145,833,900	11,325,126,994	933,645	768
June	12,210.00	3,956,466,799	64,707,872	329,335	96,597	1,082,013,570	14,264,288,095	1,166,383	(1,864)
July	12,245.00	1,430,542,252	227,744,990	135,426	97,508	1,095,351,985	14,827,223,352	1,204,300	(6,580)
August	12,390.00	413,278,918	74,253,430	39,349	170,568	1,938,750,030	13,376,005,670	1,073,081	(6,499)
September'99	12,470.00	356,174,501	96,170,614	36,275	135,766	1,692,998,622	12,135,352,163	973,590	426
Total		**17,836,702,861**	**923,385,958**	**1,548,502**	**1,342,687**	**15,441,657,509**			
Fund Balance		**12,135,352,163**		**973,590**					
October,1999	12,740.00	655,731,154	144,698,676	62,828	100,166	1,276,112,095	11,659,669,898	936,253	21,051
November	12,860.00	256,544,304	99,554,800	27,690	138,578	1,782,113,807	10,233,655,195	825,365	29,591
December	13,056.00	1,729,377,281	73,994,140	138,126	28,794	375,930,165	11,661,096,451	934,697	41,537
January'00	13,500.00		66,086,145	4,895	91,958	1,241,429,059	10,485,753,537	847,635	70,912
February	13,810.00		62,424,660	4,520	104,928	1,449,058,622	9,099,119,576	747,227	88,348
March	15,000.00	5,235,900,623	62,930,700	353,255	107,294	1,609,404,323	12,788,546,576	993,189	140,619
April	15,325.00	2,224,200,026	52,020,550	148,530	106,262	1,628,471,804	13,436,295,348	1,035,456	158,699
May	15,400.00	61,824,613	46,986,310	7,066	98,325	1,514,200,228	12,030,906,044	944,197	162,969
June	15,450.00	3,264,704,328	54,827,269	214,856	115,069	1,777,815,249	13,572,622,392	1,043,984	165,498
July	15,620.00		50,342,470	3,223	94,484	1,475,847,014	12,147,117,848	952,723	175,059
August	15,675.00		46,818,490	2,987	128,127	2,008,385,350	10,185,550,988	827,583	177,787
September'00	15,800.00	4,443,493,849	48,345,337	284,294	107,072	1,691,742,993	12,985,647,180	1,004,804	182,928
		17,871,776,178	**809,029,547**	**1,252,271**	**1,221,057**	**17,830,510,708**			
Adj of Loss 09/30/00				**(182,928)**			12,985,647,180	**821,876**	
Fund Blance 09/30/00		**12,985,647,180**		**1,004,804**					

Fund Balance in local currency	12,985,647,180
Exchange rate as on 09/30/00	15,800
Fund Balance equivalent in USD	$ 821,876
Hitorical Fund Balance in USD	1,004,804
Exchange rate Translation Adjustment	182,928

APPENDIX C6: MONETIZATION FUND PIPELINE ANALYSIS FY97-FY00

DD

Food for the Hungry International / Mozambique FY 2000 Results Report

Monetization

1997-2001 Budget	Proceeds to Date	Funds Rcvd FY 97	Expenditure FY 97	Balance 09/30/97	Funds Received thru 09/98	Expenditure FY 98	Balance 09/30/98	Fund Recvd FY 99	Expenditure FY 1999	Balance 30-09-99	Actual Fund Rcvd FY 2000	Expenditure FY 2000	Fund Balance 09/30/00	Projected Expenditure FY 01
9,068,361	4,982,185	847,214	341,366	505,848	1,686,318	1,240,511	951,655	1,401,297	1,323,169	1,029,783	1,047,356	1,255,264	821,875	1,982,489

Note: FY00 income has been adjusted for effect of the movement in the exchange rate translation for Title II fund during the FY. The adjustment has been made at the rate prevailing at the end of the FY. Hence, the actual fund balance is reflected in the reporting currency (US$).

Section 202(e)

1997-2001 Budget	Obligated thru the end of FY 99	Obligation FY 97	Expenditure FY 97	Balance 09/30/97	Obligation FY98	Expenditure FY 98	Balance 09/30/98	Obligation FY 99	Expenditure FY 99	Balance 30-09-99	Obligation FY 00	Expenditure FY 2000	Fund Balance 09/30/00	Projected Expenditure FY 01
697,126	543,882	127,631	62,131	65,500	135,232	155,101	45,631	132,019	165,014	12,636	149,000	144,983	16,653	156,083

PVOII

1997-2001 Budget	Obligated to Date	Obligation FY 97	Expenditure FY 97	Balance 09/30/97	Obligation FY98	Expenditure FY 98	Balance 09/30/98	Obligation FY 99	Expenditure FY 99	Balance 30-09-99	Obligation FY 00	Expenditure FY 2000	Fund Balance 09/30/00	Projected Expenditure FY 01
4,781,104	1,823,436	807,295	199,449	607,846	914,618	578,273	944,191	-	598,080	346,111	101,523	391,296	56,338	431,568

FHI's Match for PVOII

1997-2001 Funds Available	*Projected 1997-2001 Expenditure	Expenditure FY 97	Expenditure FY 98	Expenditure FY 99	Expenditure FY 00	Projected Expenditure FY 01	Total Expenditure LOA
726,000	726,000	61,188	173,273	-	41,863	449,676	726,000

Note: The 1997-2001 Budget figures are as per the amendment in 1998 following the approval to start the new project in Gorongosa. The project was started in FY 98

** The 1997-2001 match expenditure is projected based on the estimated PVOII expenses for the DAP period.*

APPENDIX C7: REVISED ANNUAL ESTIMATE OF REQUIREMENTS

AER Category	Commodity	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	Total
Monetization	080 Wheat	Agriculture	5770	7,452	4,080	5,318	5,780	28,400
Monetization	080 Wheat	Health	2030	2,618	1,495	2,172	2,380	10,695
Total (MT)			**7,800**	**10,070**	**5,575**	**7,490**	**8,160**	**39,095**

***Note**: The AER for FY 01 is amended based on the fund balance as at Sept. 30/00 as stated in the pipeline analysis. No fund balance is projected for Sept. 30/01. The aprroved AER for the FY (in the PAA) has been 10,810 MT of wheat.*

APPENDIX D: LOBBYING CERTIFICATE